



MRO ISSUE #8 Solutions

ACCELERATING INDUSTRY 4.0

HARNESSING INTELLIGENT IIOT
TECHNOLOGY FOR THE FUTURE

UPDATE

Indigenous
Engagement

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LATEST NEWS

EWB Australia
Partnership

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FEATURE

IIoT Essentials

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NEW

Recently added to
our range

LOCAL STOCK

Products in stock
for fast delivery

au.rs-online.com



Supporting you every day, we're by your side



We carry more than 600,000 industrial and electronics products from over 2,500 leading suppliers. From the niche specialists to the big global brands, we stock every brand you're likely to have heard of, and many more besides. This includes our own-brand RS PRO, which offers more than 50,000 products.

With fast and easy access to a broad range of products, reliable delivery, expert technical advice and



Customer Service

Take advantage of our customer support, technical advice & dedicated account managers.



Competitive Quotes

Local team dedicated to quoting you the best price possible for all your orders.



Flexible Delivery

Free next-working-day available, scheduled deliveries, or plan ahead with advance orders.



Easy Ordering

Order online, by phone, by fax, or on your mobile phone via our easy-to-use website.

From same day delivery to procurement solutions, visit RS Online to connect to a wide range of helpful services to increase productivity, save you time and money.

How can we help you today?

Order Your Way!

- **Online** at au.rs-online.com
- **On the go** with the RS Online mobile site
- **On the phone** at 1300 656 636

Customer Services & Technical Support

Mon - Fri (8am - 6pm AEST)
 T: 1300 656 636 | F: 1300 656 696
 Order & General Support: supportau@rs-components.com
 Quotes: quotesandtenders@rs-components.com
 Product & Technical Support: oztech@rs-components.com
 Credit & Billing Support: creditau@rs-components.com
 Payment & Deposit Slips: r.receipts.au@rs-components.com

WELCOME

The factory of the future interlinks productivity with efficiency and quality. The game-changer, however, is factory automation and high-speed connectivity, made possible by components with new capabilities.

Productivity, efficiency and quality are the three watchwords for the new dawn of the industrial internet of things (IIoT). Under the surface of the well-wired floor of the factory of the future are connected devices, configured to make IIoT a reality.

Regards,

Scott Philbrook
 Managing Director
 RS Components ANZ



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This edition of MRO Solutions was printed on Monza Recycled Hi Gloss Paper.

Monza Recycled contains 100% recycled fibre and is FSC® Mix Certified, which ensures that pulp is derived from well-managed forests and recycled wood of fibre. Monza Recycled is manufactured by an ISO 14001 certified mill.

Our Services

Our service solutions support you across the product lifecycle through design, build and maintain.

We can also give you advice on flexible delivery options, cost-saving ways to help you manage your inventory and procurement, through to preventative maintenance and eCommerce solutions.



Delivery & Invoice Options

With a range of flexible delivery and invoicing options all designed to suit you.

From same day to next working day to call off and consolidated delivery, we've a range of flexible delivery options to suit you.

Stay in control of your spend and reduce your purchase to pay costs with our invoicing and payment services.



Product Support

We offer easy access to product support resources online or by phone.

Our Customer Services team can help understand your needs offering product support or directing your enquiry to a qualified engineer.

Speak to a live chat member on our website for help in finding products or other technical information.

Or take a look at our technical data sheets which are available at product level. This can help save time, allowing you access to technical information 24/7.



Calibration

The RS calibration service maintains compliance across a wide range of assets to international standards. From thermometry to test meters and measuring devices, you can be confident your equipment is compliant.

Buy new, calibrated, ready-to-use equipment or, request recalibration of your own products with a fast turnaround and delivery.

ISO9001:2015 Standard or NATA-accredited laboratory.



eCommerce Solutions

For a more efficient process for your industrial and electronics product procurement, we have a service to fit your business requirements. From web-based and mobile ordering through to integrated procurement solutions.

- **PurchasingManager™** - A free web order management solution that helps you manage your spend, whilst providing visibility of orders placed through the RS website.
- **PunchOut** - Integrated into your own eProcurement system, providing fast and easy access to our full product range and purchase information.
- **eInvoicing** - Fast and secure invoicing direct from our system to yours. Eliminates paper, whilst saving you time and money in administration processes.
- **eOrdering** - Fast and secure ordering direct from your system to ours. Improves accuracy by eliminating order and invoicing errors.

Learn more au.rs-online.com/services



Product Plus

Want to source products from RS that aren't published on our website?

Product Plus is an exclusive service for customers looking to consolidate their spend. Our specialist team can support your requirements and help you source products not published on our website.

Using our expertise and relationships with over 2,500 key manufacturers, we provide access to over a million products. We will also let you know if we find an alternative product offering extra functionality or value for money benefits.

What's more, consolidating more of your purchasing with RS reduces purchase orders, saves time sourcing and helps you leverage your spend.

Benefits

- **Consolidate your vendors:** saving time managing multiple suppliers and reducing purchase-to-pay costs
- **Leverage your spend:** by placing your orders with fewer suppliers
- **Save time and speed up sourcing:** as there's no need for your teams to search and negotiate with multiple suppliers

How to use Product Plus:

1. Set up RS Product Plus with your RS Account Manager¹
2. Email ProductPlusANZ@rs-components.com with your requirements to obtain a quote.
3. Place your order directly with your Product Plus team on ProductPlusANZ@rs-components.com, telling them where and when you need delivery.



¹Qualifying criteria and minimum order quantities may apply. Orders placed through RS Product Plus are subject to additional terms and conditions.

FlexiPay+

Rent to Own solution to suit your business needs

FlexiPay+ is a rent to own solution for you to turn your business' capital expenses into operating expenses for a customised solution. It allows you to access the equipment you need now without the high initial setup costs as well as unlock access to industry leading value added services.

FlexiPay can help with some common challenges experienced in your business, including:

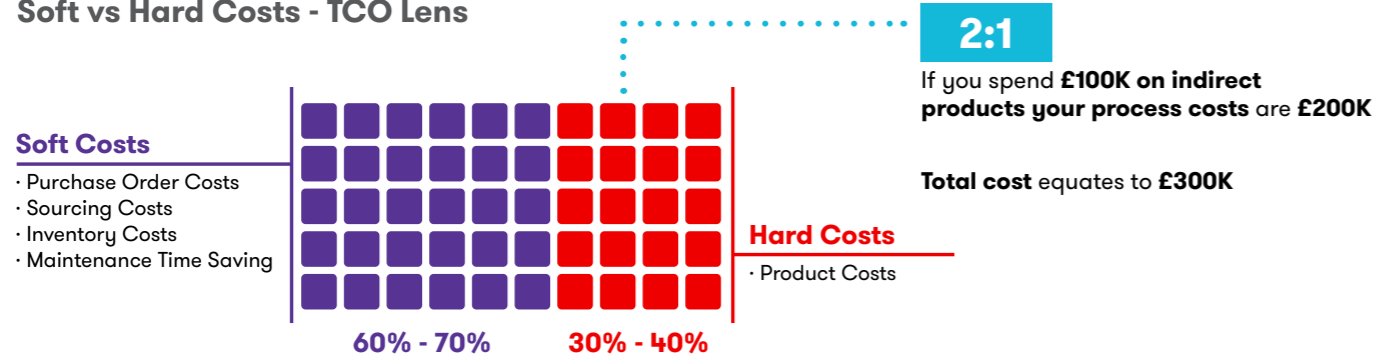
- Limited access to capital to scale your business quickly
- Lack of equipment limiting your reach to customer
- Cost savings on projects
- Finding the right product to support your needs and applications
- Quality assurance across the sites/ company
- Flexibility of building a custom product kit solution from multiple market-leading brands
- Consolidation and Convenience for customers in managing equipment
- Quick Scaling up and compliance risk
- Energy and social governance/ ethical sourcing

Reducing the Total Cost of Ownership

The soft costs around procurement having been found to amount to double that of the actual product cost there is a need for Procurement professionals to consider the Total Cost of Ownership of a part versus just the product cost alone.

The soft to hard cost spend ratio of 2:1 is made up from costs around inefficient procure to pay processes alongside on-costs associated with sourcing, inventory and asset reliability.

Soft vs Hard Costs - TCO Lens



Spread your cost over up to 5 years

RS helps you stay in control of your spend & reduce your purchase to pay costs with our invoicing and payment options. FlexiPay provides a cost effective solution to conduct energy audits and efficiency improvements in your business.

Your partner providing tailored solutions

Our FlexiPay+ solution gives you access to a wide range of products and our solutions, tailored to your individual business needs.



We consult all the relevant stakeholders in your business

Decision Makers

To uncover how we can improve the ease of doing business and reduce total cost of ownership.

- Business Leaders
- Procurement Leaders
- Engineering Leaders
- Services Leaders

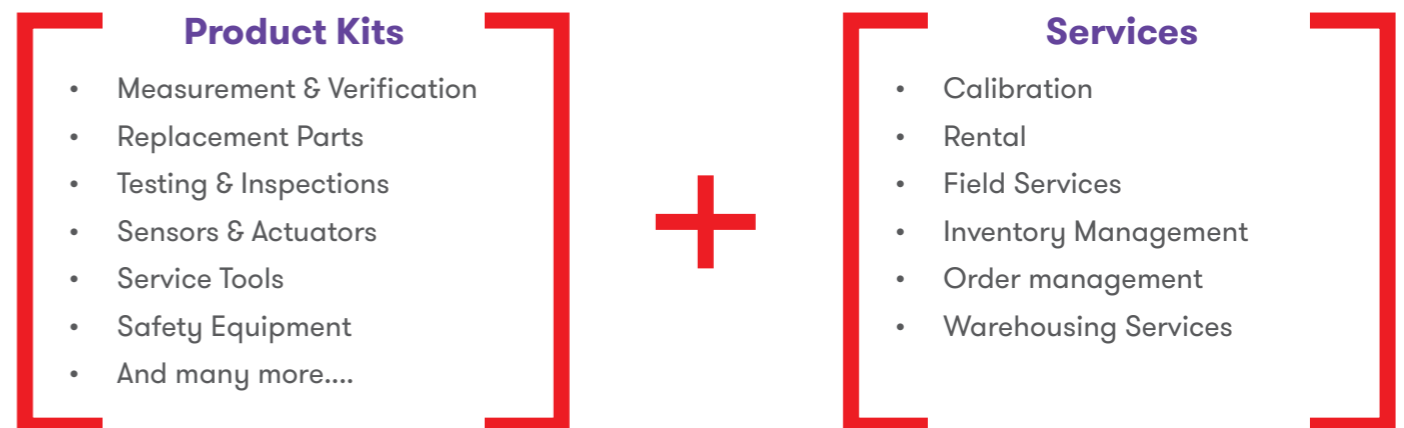
End Users

To learn how we can improve availability, responsiveness and provide technical support.

- Engineering & Projects Team
- Field Service Team
- Facility Management team
- QA/QC Teams
- Inspection & Testing Team

Access our unmatched range of solutions

We stock more than 650,000 industrial and electronic products, sourced from over 2,500 leading suppliers and provide a wide range of value-added solutions.



Over 2,500 Leading Brands

Kits are made of products from our network of global suppliers that are leaders in technology innovations.

Industry Experience

With years of experience supporting essential industries such as mining, facilities maintenance, manufacturing, transport, utilities and more, we can support you with the innovative product solutions from market leading brands for the harsh environments unique to your industry.

Contact us to request a consultation



Increasing Indigenous Engagement

We are committed to building stronger relationships with Aboriginal and Torres Strait Islander peoples.

Our vision for Reconciliation

RS Components acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea and community. We pay our respect to their Elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples today.

Increasing Indigenous engagement is a priority for RS Components.

We are committed to ensuring that Aboriginal & Torres Strait Islander people feel welcome in our business as team members, customers, suppliers and citizens.

Our vision for reconciliation is for all people to stand unified in an equal and inclusive future.



Office Mural

In celebration of NAIDOC Week, RS commissioned Eora (Sydney) based artist, Dylan Barnes to paint a mural in the Sydney office.

Dylan is a proud Wiradjuri Person who has commissioned artworks for AMP, Macquarie University, NSW Waratahs, NSW Rugby, NSW Trustee and Guardian, and many more.



“We are committed to ensuring that Aboriginal & Torres Strait Islander people feel welcome in our business as team members, customers, suppliers and citizens.”

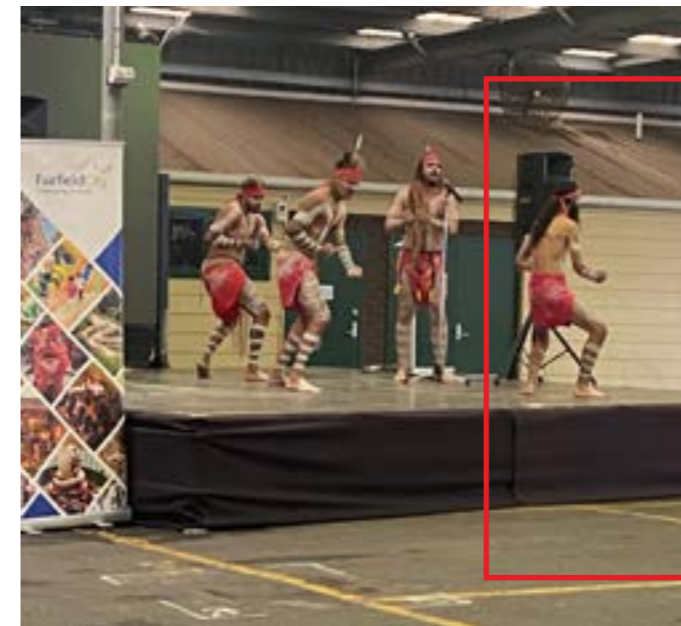
In 2021/22, we launched several initiatives to ramp up our focus on diversity and inclusion, including the launch of a new global inclusion training module through the My Academy platform. The module which is designed to raise awareness of our biases and the impact these have on the decisions we make.

RS Components is proud to celebrate NAIDOC WEEK to recognise the history, culture and achievements of Aboriginal and Torres Strait Islander peoples.

2 staff member utilised RS Components Paid Volunteer Leave and spent Tuesday the 5th of July volunteering at Fairfield City Council’s NAIDOC Week Family Fun Day

NAIDOC Week celebrates the history, culture and achievements of Aboriginal and Torres Strait Islander peoples and is celebrated by all Australians.

The event was run by Fairfield City Council and FEFAH (Fairfield Engaging Families of Aboriginal Heritage) and was such a great opportunity to support, learn more about, and more



importantly, connect with Aboriginal and Torres Strait Islander people in our local community.

It was a privilege to volunteer our help and to immerse ourselves in the culture of the oldest continuing culture in the world. Given the weather conditions currently in NSW, it was a huge task to pull off what was ultimately an extremely successful event.

RS Group offers all employees two days’ paid leave per financial year to volunteer for their chosen charitable cause

“Thank you to the two wonderful ladies from RS Components: Anna and Amy who were always on hand to assist when needed.”

Caroline Barton, Community Projects and Partnerships Officer from Fairfield City Council

An inclusive workplace

We are creating a safe, inclusive and dynamic culture where our people can thrive and grow.

Our diverse team of 7,600 individuals across 32 countries is the lifeblood of the business. Every day their passion and expertise enables us to delight our customers and make amazing happen for a better world.

A significant element of our commitment to an inclusive workplace is to ensure that Aboriginal and Torres Strait Islander people feel welcome in our businesses as employees, customers, suppliers and visitors.





News from RS Components partner: Engineers Without Borders Australia

RS Components are proud of our continued partnership with Engineers Without Borders (EWB), and their School Outreach program designed to inspire students from diverse backgrounds to create a better world through engineering.

Regioneering

As part of our partnership, RS Components supports EWB's Regioneering program, providing grants to EWB volunteer Chapter teams to fund this important work.

Schools and community groups in marginalised areas, such as those located in remote regions, in lower socioeconomic areas and with higher populations of Aboriginal and Torres Strait Islander students, need assistance in promoting relevant, inspiring opportunities in STEM.



As part of this program, EWB volunteers visit these communities, and play an important role as engaging role models with experience in a range of humanitarian engineering workshops that are practical, innovative, practical and inspiring. The one-hour workshops are experiential and provide young people with a brief introduction to what engineering is, who EWB is, and what it means to be a humanitarian engineer, creating solutions that take into account social, cultural and environmental contexts. They also achieve multiple curriculum objectives across mathematics, science and social sciences.

The program showcases the many options for a future that embraces human-centred engineering and related STEM vocations. We then give the students a real-world hands-on problem to solve, where they need to work in small teams with the support of our volunteers to design and build a prototype solution.

The Chapters that were successful in the RS Components Regioneering grant rounds were announced at the EWB Future-neers Forum held in Melbourne at the start of April - which convened over 50 Chapter leaders from around Australia in person for the first time in two years!

"The opportunity to visit schools in the Cairns region to teach students about engineering is one that I will never forget. The excitement the students showed while learning new concepts, thinking about problems in a different light, and being competitive with their peers whilst attending our workshops was truly infectious.

With the diverse range of schools, this trip gave me a new perspective into the lives of people in these communities, and the issues that still need to be solved. Thank you to the Chair of Business Liaison Assn to the warm support and hospitality to the EWB team - I truly enjoyed the experience."

Jessica Hanh |
Youth Outreach Coordinator UQ Chapter



DONATE TODAY!

Your donation will help First Nations peoples living in remote communities take advantage of the engineering knowledge, the innovations and resources they need to lead lives of opportunity.

ewb.org.au/donate/

RS PRO in the Solar Trailer Prototype

We're looking forward to seeing how the RSPro strut connectors go in EWB's prototype of the Solar Trailer.

The Centre for Appropriate Technology (CfAT) has been enabling remote Aboriginal and Torres Strait Islander communities to access renewable energy since its inception, and has been working with the in depth support of EWB on a novel mobile solar energy system since 2019.

The 'Solar Trailer project' is now entering an exciting phase of the design cycle, which aims to power remote rangers and communities to live, work and thrive on Country.

The initial project was sparked by the need for Indigenous rangers, their families and Elders to have access to energy to live and work on Country.

A mobile solar power system utilising a trailer system has been determined as having a range of advantages and the potential to deliver energy at a reasonable cost.

Read more about this exciting project.



Training Opportunity: The Power of Diversity

In order to develop the capacity of EWB's Regioneering volunteers, the RS Components partnership has also enabled EWB to develop a short-course.

Called The power of diversity in delivering engineering outreach, it aims to increase confidence, efficacy and sensitivity working with community partners, and includes modules on the topics such as: listening in cross-cultural and community contexts; asking questions; and unpacking assumptions and biases, and opportunities to reflect on how these skills and mindsets relate to participants' own current work/projects.

An in-person workshop will be delivered at RS Components Office and an online self-paced learning course will be launched on EWB Australia's digital learning platform, LearningX.



WHY INDUSTRIAL IOT SHOULD BE PART OF YOUR MAINTENANCE STRATEGY



MAINTENANCE IS AN UNAVOIDABLE CERTAINTY. WHAT IS CRUCIAL IS HOW YOU APPROACH THE TASK OF MAINTENANCE, AND HOW YOU ENSURE YOU MINIMISE THE IMPACT ON THE DAY TO DAY OPERATION OF YOUR BUSINESS.

Setting and evolving your maintenance strategy as technology and techniques develop is an important part of ensuring your organisation is setup for success. The activity of maintenance continues to change, and every business will be at a different phase of maturity – all with opportunities to use and benefit from Industrial IoT.

Moving up the maturity pyramid

Most businesses already enact preventative maintenance and an increasing number are adopting the principles of condition-based maintenance. However, implementing true predictive maintenance requires higher levels of data, and this is where IIoT can be a key enabler. It allows both existing process data to be unlocked, as well as additional data from condition monitoring sensors to be collected. This data can then be combined with data from OEE (Overall Equipment Effectiveness) tools and other sources in a CMMS (Computerised Maintenance Management Software) – which are becoming increasingly cloud based.



Total Productive Maintenance (TPM)

While not a new idea, the concept of getting operators involved in maintaining their own equipment, and emphasising proactive & preventive maintenance lays the foundation for improved productivity - fewer breakdowns, stops, and defects.

The barrier has often been the cost and implementation of in-process instrumentation that indicates to an operative when a machine or process performance is changing, and maintenance is required.

SMC is one of many manufacturers now creating simple to use, cost effective devices such as digital process indicators which can be easily added to machinery to show performance changes.

Monitoring variables such as pressure, temperature and current, then making these visible to an operator combined with some training on routine maintenance; such as cleaning, lubricating, and inspection can significantly reduce unforeseen stoppages.

It also has the additional benefits of giving operators greater “ownership” and knowledge of their equipment and frees maintenance personnel for higher-level tasks.

More data, less maintenance?

Big data is an often-used phrase, but with reference to maintenance it’s clear that if you knew the current condition of all wear parts within your process predicting when and what needed replacement would be easy.

While this is still some way off there are emerging technologies which can be retrofitted to provide you with enhanced levels of information on the status of your process.

Diagnostic technologies such as thermography and vibration analysis are helping identify changes in equipment performance, but these still require the maintenance team to inspect the equipment.

IO-Link is an embedded technology which is being increasingly added to presence and proximity sensors to provide additional performance or status information.

The big benefit of IO-Link is that this data is invisible to the machine and is captured via a gateway. This allows IO-Link enabled sensors to be added to existing equipment without extensive re-work. The status data can then be extracted and displayed via a separate PLC or IPC allowing the operations team to gain useful insight on the process or production line. It can also be fed to a CMMS or OEE tool as an additional dataset.

Regardless of the size of business, moving up the maintenance maturity pyramid and starting to think about how IIoT could be part of your maintenance strategy isn’t just a nice to have – it could be the difference between staying competitive and thriving or merely surviving.

THE BIG BENEFIT OF IO-LINK IS THAT THIS DATA IS INVISIBLE TO THE MACHINE AND IS CAPTURED VIA A GATEWAY.





Touch Screen HMI Displays

- High-performing HMI display used to monitor machines, perform tasks and visualise operational status
- This HMI offers a 7-inch control panel screen, can be used as a stand-alone device, offer multi-communication ports, a fluent touch-screen, and excellent communication stability



Scan the QR Code to view our range

Siemens SIMATIC IOT2050

- Intelligent Siemens SIMATIC IOT gateway harmonises the communication between different data sources, analysing data locally



SIEMENS

Scan the QR Code to view our range

TRIO DIN Power Supplies

- Compact, high reliability DIN rail power supplies for industrial control & automation use
- Options available with 12Vdc, 24Vdc & 48Vdc outputs and 1 & 3-phase inputs from 60W-960W
- Adjustable DC output and LED status indication



883-7374	24Vdc, 3A, 85 → 264Vac 1ph input	2903147
883-7352	24Vdc, 5A, 85 → 264Vac 1ph input	2903148
883-7364	24Vdc, 20A, 85 → 264Vac 1ph input	2903151

Ethernet Switches

- Five RJ45 ports
- Width of 23 mm
- Operating temperature range of -40°C to +80°C
- Supply voltage range of 5 V to 30 V DC
- DIN rail mounting
- Gigabit series



189-0537	94 × 99mm
189-0536	95 × 99mm

Kunbus Industrial Computers

- IIoT gateway, DIN rail PC or small controller? The open platform concept and a wide range of available expansion modules allow maximum freedom when implementing IIoT projects.



Scan the QR Code to view our range

IO-Link Ultrasonic Sensors

- Precision ultrasonic proximity sensors with added IO Link capability allowing you to gain additional status data in real time



Scan the QR Code to view our range

TeSys Island Load Management

- Schneider Electric's innovative load management solution designed to switch, protect and manage motors and other electrical loads up to 80A



Scan the QR Code to view our range

Harmony XVU Modular Tower Lights

- The innovative Harmony XVU range of Ø 60 mm tower lights and sounders offers multiple lighting patterns, mounting flexibility, modern aesthetics, and unrivalled brightness.
- IP65 and



881-2797	LED Beacon Green, Steady Light Effect	XVUC23
881-2791	LED Beacon Red, Steady Light Effect	XVUC24
881-2832	Beacon Tower Terminal Unit	XVUC21B
881-2823	Buzzer	XVUC9S

Wireless Harmony XB5R series Receivers

- Wireless and batteryless package, containing a push-button, set of caps and receiver
- Reduction of wiring allows for a quick and easy installation
- Flexible due to its mobility, giving greater control to operators. Can be used to remotely control machines up to 25 m away



739-8060	10 colored caps, plastic, 24...240 V AC/DC	XB5RFA02
739-8064	10 colored caps, metal, 24...240 V AC/DC	XB4RFA02
739-8067	6 colored caps, metal, 24 V DC	XB4RFB01

Modicon M580 Communication module

- Advanced web server
- Ethernet backplane transmission support medium
- Transparent ready concept
- Standard module format
- IP20 degree of protection



230-6718	BMENOC0311
230-6746	BMXNRP0200

ATV320 Variable Speed Drives

- The Altivar Machine ATV320 variable speed drives are simple, yet enhanced machines
- They have been designed for original equipment manufacturers and meet simple and advanced applications requirements for three phase synchronous and asynchronous motors, from 0.18 to 15 kW



125-3255	2.2 kW, 230 V ac	ATV320U22M2C
125-3262	5.5 kW, 400 V ac	ATV320U22M2C

Harmony XALK Series Emergency Stop Push Buttons

- Easy to use "turn to release" functionality for easy reset once activated
- Light grey RAL 7035 base enclosure, with a yellow RAL 1021 cover colour and a prominent, bold red push button for easy identification to its function



795-1295	Twist to Reset, NC	XALK178
609-4708	Twist to Reset, NO/NC	XALK178E
795-1309	Pull to Reset, NC	XALK198
795-1302	Key Reset, NC	XALK188

XUY roller sensors

Photo-electric roller sensors for simple integration into your conveyors system

OsiSense™ XUY Roller Sensors

You need a fast, simple, and reliable solution for sensors' integration into your roller conveyors?

Optimized installation and maintenance

Simple, fast with no settings, no alignment, no environment teaching, and optimized mounting with no additional brackets or reflectors required.

100% detection

No background or foreground limitations (ideal especially with presence of high-visibility jackets) while detection is effective on the full width of the conveyor.

Shockproof to improve operation costs

Benefit of the mechanical installation, embedded within the conveyor frame unlike solution with reflectors and brackets, it prevents product damage and extends lifetime.

Benefits

Fast, modular, and minimum installation time:

- No tools needed
- Easy mounting from the top, whatever the size of the conveyor
- Gain of 50% in installation and adjustment
- Different fixing solutions

100% detection:

- No package colour effect thanks to reliable detection
- Easy direction adjustment, every 15°
- Full length detection thanks to multiple sensors

Shockproof protection cuts maintenance costs:

- The sensor is embedded within the frame and fixed between rollers with no risk of shock destruction



Characteristics

- From 1 to 6 sensors alongside the tube
- Detection mode: diffuse infrared
- Sensing distance: up to 100 mm
- Dust test-proof lens (shape and gain)
- Dimension: Ø 12 mm, from 200 to 900 mm
- Material case/lens: aluminium/PA
- Fixing solutions with spring effect:
 - Hexagonal 11.1 mm
 - Ø 8 mm
- Adhesive part
- Supply voltage: 24 V DC
- Connection: M12, 4 pins connector or cable
- Output: PNP/NPN, NO/NC by wiring
- Switching frequency: 500 Hz
- Operating temperature: -10°C to +55°C
- Degree of protection: IP50 (IP65 on request)
- New design with LED information even visible from behind



OsiSense XS ATEX D Inductive proximity sensors

- Detection of metal objects up to 60mm
- High performance technology
- Comprise a sensing face winding oscillator
- High corrosion and impact resistant nickel plating

NEW



OsiSense ATEX D Electromechanical pressure sensor

- Operating in any position
- Diaphragm actuator for operating from any position
- Snap action silver contacts
- External setting

NEW



221-1744	6...150c/mn	XSAV11373EX
221-1748	120...3000c/mn	XSAV12373EX
221-2982	Sn4mm	XS612B1PAL10EX



221-0089	10bar, 1 C/O	XMLB010A2S12EX
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Ultrasonic Proximity Sensors

- High-performing HMI display used to monitor machines, perform tasks and visualise operational status
- This HMI offers a 7-inch control panel screen, can be used as a stand-alone device, offer multi-communication ports, a fluent touch-screen, and excellent communication stability



Fibre Optic Sensor

- Fibre-optic sensor
- PVC cable electrical connection
- Response Time <1 ms
- PVC cable electrical connection
- Length of 65 mm
- Minimum operating temperature of -10°C



237-0799	0 → 300 mm Detection
166-9497	0 → 300 mm Detection, Box of 540

E2EX IO-Link Proximity Sensors

- Downtime can be reduced. Notifies you of faulty parts and such phenomena in the Sensor in real time
- The frequency of sudden failure can be decreased
- Notifies you of objects being too far or too close



Scan the QR Code to view our range



896-7305	NPN-NO, PNP-NC Output
----------	-----------------------

M1500LF Relative Humidity Transducers

LOCAL STOCK

- Constructed from a patented solid polymer structure and provide reliable and accurate measurements,
- Full interchangeability
- Compact size
- Very low temperature dependence
- Not affected by water immersion



893-7247	Humidity Sensor	HPP805A031
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OsiSense XUY Roller Sensors range is stocked at RS

Shop online au.rs-online.com



Shop online au.rs-online.com



Compact Selector Switch

- Black
- Actuator Type: Short handle
- Bezel Material: Black Plastic
- Illumination: Non-illuminated
- Function: Maintained

NEW



Scan the QR Code to view our range



Smile 11RO2 Reset Button

- Reset light button in Smile enclosure for connection to Orion2 Base, Orion2 Extended and Orion3 Extended using M12-3R or Tina 10B
- One M12-5 male connector

NEW



231-9999 Black, Yellow

2TLA022316R3100

Stainless Steel Enclosed E-Stops

- 2NC/1NO contact configuration
- Conduit entry of M20
- High pressure hoses with detergents at high-temperature

LOCAL STOCK



826-4390 Twist to Reset, 2NC/NO, 240 V 231001
 826-4394 Twist to Reset, 2NC/NO, 240 V 231002
 826-4404 Twist to Reset, 2NC/NO, 240 V 231005

RS PRO Panel Mount LED Pilot Lights

- Brighter than standard incandescent bulbs
- Very low power consumption
- Temperature range -25 → 55 °C



763-7918 Green
 763-7909 Red

SIRIUS ACT Push Button Head

- Self-holding function of the actuator when mounting
- Twist prevention integrated into patented holder design
- Stackable contact modules

LOCAL STOCK



874-1712 Red 3SU1000-0AB20-0AA0
 874-1689 Green 3SU1000-0AB40-0AA0

PBES16 Series Pushbutton Emergency Stop

- This series has multiple lighting options, agency approvals, and meets IEC 60947-5-1 & IEC 60947-5-5 standards
- This switch is offered with two different actuator button styles
- The PBES16 Series has a 20N actuation force for ruggedized applications and to avoid accidental actuations and is IP65 rated to withstand harsh environment

NEW



Scan the QR Code to view our range



XCSE Solenoid Interlock Switches

- Key operated lock to allow authorised override of solenoid (key supplied)
- 2 LED indicators (orange/guard open, green/guard closed, key in locked position)
- Heavy duty metal compact style to IP67

LOCAL STOCK



263-3725 2NO/1NC, Power to Unlock

XCSE5312

Harmony XPEA Plastic Footswitches

- Available with or without trigger mechanism in 1 or 2 step configurations
- Large surface area of pedal assures stability of foot and operator comfort
- High and wide protective cover accommodates both large size and safety boots

LOCAL STOCK



537-5270 Without cover, 2 NC + 2 NO XPEB111
 537-5315 With cover, 2 NC + 2 NO XPEB311
 537-5337 With cover, 2 NC + 2 NO XPEB511

XCSA Safety Interlock Switches

- 3 positive opening contacts as standard (on guard opening)
- A key operated lock enables positive locking of the guard
- Optional version with orange LED to indicate guard open/closed

LOCAL STOCK



397-2166 3NC, Key, Zamak XCSA801
 397-2150 2NC/1NO, Key, Zamak XCSA701

Series 84 EAO IO-Link Touch Switches

- Attractive design and reliable operation
- The switch has powerful, consistent illumination with innovative technologies
- Animated illumination options for a wide variety of potential applications

NEW



Scan the QR Code to view our range



HDLS Snap Action Rotary Limit Switch

- Voltage rating of 600V AC for use in high-power systems
- Compact dimensions of 106.78 (length) x 41.1 (width) x 61.9mm (depth) for use in areas with limited space

LOCAL STOCK



691-7257 NO/NC LSA1A

Panel Mount Toggle Switches

- The RS PRO toggle switch offers a mechanical life of 30,000 make-and-break cycles
- An operating temperature range from -40°C to 85°C allowing for use in a wide range of situations



209-9375 On-Off-(On)
 209-9368 On-None-(On)
 209-9373 (On)-Off-(On)
 209-9362 On-(On)



Extension Sockets & Appliance Connectors

- All connectors have impact resistant, UV stabilised mouldings
- The IP66 rating can be achieved when extension socket/connectors are used in conjunction with compatible accessories



214-1825	3 Flat PIN, 250V, 10A	56CSC310-RO
867-4589	4 Round PIN, 500V, 32A	56CSC432-EO
867-4573	5 Round PIN, 500V, 32A	56CSC532-EO

USB 2.0 Micro B to USB A USB Cable, Male to Male

- Allows easy connection of a mobile device to host computer or charger
- Reliable Hi-Speed connection
- Moulded connector



876-2403	1.2M, Black
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Buccaneer 900 Series Cable Mount Connectors

- Suitable for single and three phase, are ideal for harsh environments.
- With an IP68 ingress rating, they are fully sealed and protected from the elements
- A knurled locking ring ensures secure mating and a tamperproof connection
- A dust cap for extra protection is also available separately.



344-4009	4 Way Cable Plug	PX0911/04/P
344-4021	5 Way Cable Plug	PX0911/05/P

Shop online au.rs-online.com

Nano-Change Connectors

- These Nano-Change connectors from Molex are designed to withstand harsh weather and industrial environments, for interconnecting miniature sensors and actuators in industrial control applications



Scan the QR Code to view our range



Socket Extension Leads

- Standard 10A current with 2400W 6 outlets
- Features overload protection to prevent dangerous overheating



241-0659	1.8m, 4 Socket	D104PAUSBWE
241-0670	900mm, 6 Socket	R105/6TWIN

RS PRO 400 Piece Bootlace Ferrule Kit

- Colour coded insulation for easy ferrule size identification
- Excellent electrical connection
- Crimped terminal can be repeatedly inserted and removed from connection without degrading end of the wire



513-2540	400 Piece
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Shop online au.rs-online.com

NEW

Type 44® wire

- Dual wall construction
- Small size, lightweight
- Low smoke and corrosive gas generation
- Resistant to most chemicals & electrical arc tracking
- Highly flame retardant
- 600 V Voltage Rating



789-3672	1.23 mm ² , 16 AWG	44A0111-16-0
789-3676	1.3 mm ² , 16 AWG,	44A0111-16-2

IP68 Metric Dome Top Glands

- Metric threaded
- Completely sealed against dust
- Excellent water resistance



669-4654	M12, 3-6.5mm
669-4660	M20, 4-9mm
669-4664	M20, 6-12mm
669-4673	M20, 10-14mm
669-4686	M63, 34-44mm

Amphenol® MS Circular Plug Connectors

- Durable, field-proven design
- Threaded couplings for quick and accurate mating
- Keying and polarization to prevent mismatching
- Durable construction with high grade aluminium shell
- Zinc plated olive drab chromate finish for high resistance to corrosion
- Rubber inserts for high dielectric strength and resistance to vibration



475-814	PLUG,15A	MS3106A-10SL-3P
475-820	SOCKET,15A	MS3106A-10SL-3S

Shop online au.rs-online.com

LOCAL STOCK

M12 Cable RJ45 Cordsets

- The TE Connectivity M8/M12 Cable assembly is double ended cable configuration without LED
- Assembly type is overmolded with a screw terminal connection that offers a high degree of environmental protection this cable assembly is well suited to industrial purposes



Scan the QR Code to view our range



Male USB A to Female USB A USB Extension Cable

- USB type-A to USB type-A extension cable
- Male-to-female connectors
- Fully compatible with Windows operating systems 98SE, 2000, XP, Vista, 7 and Mac OS X
- Compliant with USB 2.0
- Data transfer rates up to 480 Mbit/s



790-3681	USB 2.0, 15m
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100 / 200 Series

- Designed for industrial use where heat, dust, moisture and common oils and chemicals are prevalent, this range offers compact multipole connection where space is at a premium.
- Wide range of accessories



314-6626	4WAY INLINE PLUG,5A	IMC16-2204X
314-6799	2WAY FLANGE REPTACLE,13A	IMC24-1602X
314-6834	12WAY FLANGE REPTACLE,5A	IMC24-2212X
314-6705	2WAY INLINE PLUG,13A	IMC26-1602X

Shop online au.rs-online.com



DIGITIZED, AUTOMATED & EFFICIENT SHAPING INDUSTRY 4.0 BY EMPOWERING THE SMART FACTORY

The IIoT becomes reality: the transformation to smart factories for environmental sustainability and operational competitiveness is on its way - powered by semiconductor solutions that are the key to smart, safe and sustainable manufacturing processes. It is expected that the smart factory market will grow at a compound annual growth rate (CAGR) of 9.6 percent to reach around 244.8 billion U.S. dollars by 2024.*

INCREASE IN MANUFACTURING AND PRODUCTION COMPLEXITY

Successful industry has seen a tectonic shift in both consumer and B2B customer demands and increasing manufacturing and production complexity. By using the power of big data and digital technologies companies can overcome these challenges to achieve greater productivity and growth, to meet their sustainability commitments, and to ultimately become more competitive.

Therefore, it is essential to collect, understand and use these massive amount of data created in the Industrial Internet of Things (IIoT). For this new world of manufacturing processes in the context of Industry 4.0 it is a prerequisite to have a scalable industrial IIoT stack that's going to be able to handle that data - secured and efficient.

The goal is to create autonomous production in which people, machines, systems and products communicate with each other independently. This is intended to make manufacturing processes more flexible, scalable and efficient.

The result are intelligent value chains and product life cycles that begin with development, continue through manufacturing, assembly, product delivery and maintenance, and finally end with recycling.



WHAT MAKES A FACTORY SMART?

The advantages are obvious but what makes a factory smart?

The benefits of a smart factory are obvious: maximizing performance, ensuring high quality, reducing the risk of human error, providing data for analysis and optimization purposes, minimizing downtime and disruptions through predictive maintenance. For a factory to become smart, the following requirements must be met:

Smart usage of data: While production is running at full speed, huge amounts of data are collected. It is essential to collect, to analyse, to understand, and to deploy this massive amount of data effectively and securely to leverage the full potential of the IIoT.

Ubiquitous, reliable connections: The reliable and secured connectivity of people, machines and "things" in physical and virtual domains via wired and wireless technologies is the heartbeat of every smart factory, allowing high-speed communication for complex automation.

Autonomous production: To create autonomous production, people, machines, systems and products need to communicate with each other independently and to react accordingly. Along artificial intelligence and machine learning, smartness helps to reduce human intervention e.g. once manufacturing conditions deviate.

Transparent and flexible supply chains: Real-time and end-to-end visibility, shared with all participants of the supply chain - customers and suppliers - enable smart and resilient supply chains. Issues can be anticipated at an early stage and therefore prevented before they occur.

Sustainability: Rising energy demand while optimizing energy efficiency and reducing CO2 emissions, can be achieved by reliable data, collected by sensors.

Interpreted correctly they can lead to energy savings by uncovering inefficient production flow, optimizing production and logistics planning, and anticipating maintenance needs



Infineon CoolSiC™ 1200 V, 45 mΩ SiC MOSFET



- Best in class switching and conduction losses
- Benchmark high threshold voltage, $V_{th} > 4\text{ V}$
- 0V turn-off gate voltage for easy and simple gate drive
- Wide gate-source voltage range
- Robust and low loss body diode rated for hard commutation



222-4865	52 A, 1200 V	IMZ120R045M1XKSA1
222-4867	26 A, 1200 V	IMZ120R090M1HXKSA1
222-4868	19 A, 1200 V, (Tube of 30)	IMZ120R140M1HXKSA1
222-4872	4.7 A, 1200 V, (Tube of 30)	IMZ120R350M1HXKSA1

thinQ! Silicon Carbide (SiC) Schottky Diode

- The Infineon thinQ!™ Generation 5 offers a new thin wafer technology for SiC Schottky Barrier diodes improving the thermal characteristics
- The SiC Schottky Diode devices offer advantageous high voltage power semiconductor features such as higher breakdown field strength and improved thermal conductivity allowing greater efficiency levels



133-9945	1200V 56A	IDH20G120C5XKSA1
133-9852	1200V 11.8A (Pack of 2)	IDH02G120C5XKSA1

Infineon EiceDRIVER™ Isolated Gate Driver



- Single channel isolated gate driver
- For use with 600 V/650 V/1200 V/1700 V/2300 V IGBTs, Si and SiC MOSFETs
- Up to 14.0 A typical peak output current
- 40 V absolute maximum output supply voltage



228-6505	13.5 A, 35V 8-Pin (Pack of 5)	1ED3124MU12FXUMA1
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Evaluation Board For EiceDRIVER



- The Infineon's evaluation board is in half-bridge configuration with two-level slew-rate control enabled gate driver ICs 1ED3241MC12H
- This board enables the evaluation of the slew-rate control switching scheme. The switch type can be freely chosen

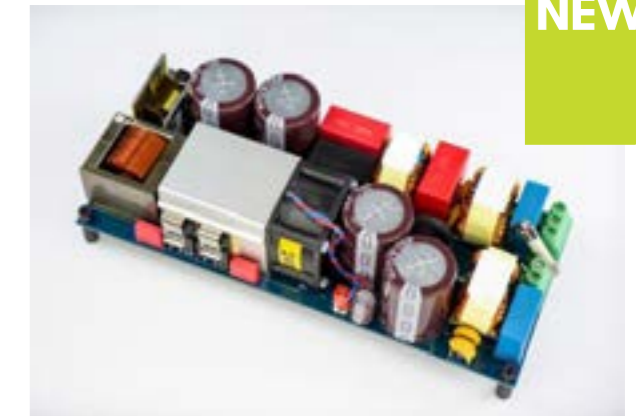


232-5724	Evaluation Board	EVAL1ED3241MC12HTOBO1
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Bridgeless Totem-Pole PFC Evaluation Board



- High efficiency bridgeless totem-pole PFC
- Perfect for high efficiency applications (close to 99%)
- Bidirectional operation (digital control)
- High power density
- Enabled by CoolSiC™ MOSFET 650V



214-1996	PFC Controller	EVAL3K3WTPPFCISICTOBO1
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Shop online au.rs-online.com

7 TIPS TO SECURE YOUR IIOT DEVICES

JOSEPH DA SILVA, CHIEF INFORMATION SECURITY OFFICE AT RS GROUP OFFERS HIS VIEW ON HOW TO ENSURE YOUR IIOT IMPLEMENTATION IS AS SECURE AS IT CAN.



System HACKED

Cyber-security has been a subject that has given IT managers sleepless nights for years, however the emergence of The Industrial Internet of Things (IIoT) has elevated the potential risk as increasing numbers of devices are connected to business networks.

While IIoT offers many exciting opportunities for businesses, from predictive and proactive maintenance all the way through to potential new income streams it's important to see any IIoT implementations as part of a system, and not just in the context of the overall IIoT solution.

IIoT implementations form part of a wider system within your business, whether intentional or not, and it's important to consider how an IIoT implementation could expand the overall attack surface of the whole organisation. An insecure IIoT solution could offer an entry point to your operational technology environment or your wider IT environment; or it could offer an entry point to your logistics processes, your stock control processes or your finance processes.

So, what can you do to protect yourself? Is it time to put on a tinfoil hat and return to the age of steam? Obviously not. Security is a risk-based game and the first step to mitigating risk is to understand it. Security should not be considered 'someone else's problem', it certainly shouldn't just be left to your IT team, and worst of all it should not be left to external suppliers.

Remember: every device is a potential new entry point for a hacker. You don't need to be an expert, but you do need to ask the right questions and take the right actions. Some of these are described below:

1 Change defaults. Most IIoT devices, and indeed most IT software, ships with default passwords. Get these changed immediately to something strong and unique (definitely don't use the same password for everything...). Avoid any equipment with hard-coded passwords; if it's hard-coded, it is already known by every hacker out there.

2 Separate networks. Do not put IIoT devices on your corporate network, or on the same network that you use for your OT (operational technology) equipment. This really is asking for trouble. A single device should not be able to access multiple networks either, otherwise they can be used as a 'bridge'.

3 Disable unnecessary functions. See that TV you have on the wall of your meeting room? Bet you it's a smart TV. Bet no-one's turned off the Bluetooth functionality. Or its microphone. Or the webserver that it

operates. Unnecessary functions can be used as a 'way in', both to the device and to the wider network that it sits on. Turn things off programmatically, or physically disable them; a pair of pliers or liquid epoxy are simple ways to permanently disable a USB socket for example.

4 Stay up-to-date. Software vulnerabilities are very common, but what's more common is known fixes to these vulnerabilities not being applied promptly. Ensure firmware and software are regularly updated and have a process to do this, particularly if it involves planning in downtime. You're not going to be able to take a 24x7 assembly line down, but you should be able to tolerate downtime in condition monitoring sensors.

5 Test test test. Hire a specialist penetration tester who has expertise with industrial equipment and operational technology – not all of them do. This is a specialist area that requires specialist knowledge of PLCs and SCADA equipment and you want a friendly face to test it before an unfriendly one does. Most importantly, follow their recommendations – you may not be able to fix everything, but make risk-based decisions on what you do fix, what you mitigate through another route and what you accept.

6 Be clear who's doing what; even if you're buying a supposedly 'turnkey' solution, it's never quite as simple as that, particularly if the service provider is themselves relying on a number of third parties. Understand where your data is going, who has access to it and how it's being protected. "It's in BigCloudProvider's datacentre, it's secure" is not a good enough answer.

7 Finally, and most importantly: have a plan for when things go wrong. Run some scenarios and regularly test it via a simulation or a dry run. In the event of a security incident, it needs to be very clear who does what and when, and having this clearly documented and easily accessible, including templated communication statements, will save a lot of time and adrenaline.



Joseph is an accomplished Information Security leader with extensive IT and business experience across multiple sectors; he is driving Electrocomponents Information Security agenda to help both the organisation and its customers to understand and address risk whilst enabling business growth. He holds CCISO, CISM and BCS qualifications as well as an honours degree in Biochemistry and is currently performing research for his PhD.



Aluminium Conveyor Struts

- From RS PRO, Aluminium extrusion for use with conveyor systems
- Compatible with Item profile accessories and structural systems products



850-8498 2000mm
850-8495 1000mm

Galvanized Steel Round Conveyor Roller

- Conveyor tracks based on aluminium profiles with uniform rollers made of plastic and steel
- For fast, simple construction of conveyor or manual slide sections
- Can be used in conjunction with Bosch Rexroth Mechanical components



665-7261 40mm x 525mm 500N 3 842 537 163
665-7273 40mm x 325mm 150N 3 842 525 741

Conveyor Rollers

- RS PRO introduces these sturdy cages for roller track profiles AL. They support 3 rollers by means of axles; the end piece provides a neat finish at the end of the profile



229-9165 Black, 26mm x 33.3mm (Bag of 10)
229-9166 Black, 26mm x 33.3mm (Bag of 100)
229-9164 Grey, 26mm x 33.3mm (Bag of 10)

Single Roller Units

- RS PRO introduces this compact roller unit for roller tracks
- They feature a very small centre distance and maximum number of axles for minimum vibrations and reduced point load on the goods
- Roller units come completely pre-assembled



229-9196 Black, 9mm x 50mm 100N Load Capacity
229-9177 Grey, 24mm x 33.3mm 150N Load Capacity
229-9175 Green, 24mm x 33.3mm 150N Load Capacity

Iglidur® Round Plain Conveyor Rollers

- Iglidur® range of knife-edge conveyor pulleys provide precise and lubricant-free deflection for conveyor technology applications
- These can be used in many application areas including, food processing, automation, material handling and packaging



866-1754 14mm x 70mm A180RLM-0814-70
866-1763 9mm x 325mm P210RLM-0409-50

Heavy Duty Conveyor Turntable

- This RS PRO industrial conveyor turntable lets you change the direction of your conveyor system to sort products into multiple lanes
- It's fitted with precision ball bearings that reduce friction to provide smooth, seamless movement



278-7844 400mm, 7.5kN Load Capacity
278-7872 650mm, 15kN Load Capacity
278-7850 500mm, 9kN Load Capacity

RS PRO ATEX Explosion Proof Junction Box

- Glass reinforced polyester (GRP) with added graphite offering a highly durable enclosure
- Black RAL 9011
- IP66 protection EN 60529 to prevent dust and water ingress



144-4455 160mm x 160mm x 90mm BEXBG15DPAC230AB1A1R/R

ARCA Cabinets

- Totally non corrosive and UV stabilised
- IP66/K10 protection classification
- 7 sizes in portrait and landscape versions
- Glazed or solid covers with many locking options



798-2000 300x200x150mm
798-2003 400x300x150mm
798-2016 500x400x210mm
798-2019 600x400x210mm

IP69K 304 Stainless Steel Wall Boxes

- Material: Stainless steel
- IP69K rating
- Lockable
- Double lipped edge to ensure higher strength and ease of installation
- Easy to use, including removal of the door



758-6996 300 X 300 X 200MM
758-7006 400 X 300 X 200MM
758-7015 400 X 500 X 150MM

Smoked Inspection Windows

- Allows viewing or adjusting of components mounted inside any enclosure without opening the door or removing the lid
- Suitable for steel, aluminium or thermoplastic enclosures and panels
- Panel



263-6982 248x128mm L 12 II
263-7008 248x218mm L 24 II
509-3293 331x277mm L 43 II
509-3300 377x331mm L 44 II

ARCA Cabinet Accessories

- Complete range of accessories including:
- Mounting plates: Easy to assemble to desired depth with special corner brackets.
- DIN-rail sets: Including DIN rail frame, front plate, corner brackets and screws for easy and quick installation
- Inner door sets: galvanized steel, no tools needed for installation, lockable



811-1975 Inner door IDS ARCA 5040
811-2022 DIN rail set DRS ARCA 504021
811-2057 Small mounting lug set WMK ARCA 10 Small
811-2069 Large mounting lug set WMK ARCA 10 Medium



DC Compact Fans

- EBM-papst ingress protected IP68 fans are ideal for operation in the harshest of environments
- These fans are designed to perform subject to high dust, high humidity and direct water exposure both in and outdoors
- IP68 compliant DC fans with electronic rotor switching and integrated electronic switching regulation



LOCAL STOCK

ebmpapst

776-1285	18W	6224NU
776-1282	17W	6424U

Centrifugal Fan

- DC operation
- Airflow of 33 CFM (cubic feet per minute)
- Ball-bearing type
- Blower type
- Brushless commutation type
- Forward direction of curve
- Fan speed of 4000 rpm (rotations per minute)
- Maximum current of 780 mA
- Mounting hole diameter of 4.5 mm



787-4022	33cfm, 24 V dc DC
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Fan & Filter Ventilating Units

- Reversible air flow direction
- Click-in fittings with no screws required
- Quick and easy to assemble
- ABS plastic grill with pebble grey (RAL 7032) powder coated finish
- IP44 protection rating



LOCAL STOCK



885-3048	150 x 150mm	TX-FIL12XNOA
885-3045	250 x 250mm	TX-FIL25XNOB

Media Roll Filter

- Thermally bonded
- Initial pressure drop (to EN779): 250 pa
- Media velocity 1.5 m/s
- Dust holding capacity 400 g/m2
- G3 grade
- Thermal stability 100°C (briefly up to 120°C)



122-1771	Roll, 1m x 20m, 10mm (thickness)
122-1772	Pad, 1m x 1.6m, 14mm (thickness)

Wall Mounted Extractor Fan

- Wall mounted
- Airflow of 76m³/h
- Lubricated for life motors with thermal cut-out protection
- Clip-off front cover for ease of cleaning
- Noise level of 35dB (A)
- Duct size diameter is 100mm



LOCAL STOCK



811-7279	76m ³ /h	90839AW
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Steel Finger Guard

- Finger guard
- External width of 115.6 mm to fit 120 mm fan
- Screw hole spacing of 123 mm
- Bright chrome in colour
- Made of steel



737-3986	For 120mm Fans, 115.6 x 115.6mm
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Electrical Vacuum Switch

- PSilicone diaphragm
- Converts vacuum signal to electrical output
- Repeatability is +/-0.1bar
- Zinc-plated bodyLED indicator for operational status



LOCAL STOCK



289-5513	G 1/8 -1bar to -0.2 bar	M/58024/VF
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Automatic Drain Valve

- Precise self-activated control of fluids and air to a specified programme (media: air, gases, oo, oil etc.)
- Automatically opens for a set time to drain condensation
- Length of time open (0.5 to 45 minutes) and frequency both adjustable
- Discharge time 0.5 to 10 seconds
- Minimal risk of internal blockages due to increased internal tolerances



725-125	240V 50Hz
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Pneumatic Tube PUN-H

- Flexible polyurethane
- High resistance to microbes and hydrolysis
- Food-safe
- Suitable for use with energy chains
- Operating medium: compressed air, vacuum, water
- Also available as DUO twinned plastic tubing
- Examples shown, all 50m length



LOCAL STOCK

FESTO

121-6292	PUN-H-6X1-BL blue, 6mm OD
126-2776	PUN-H-6X1-NT natural 6mm OD
121-6294	PUN-H-6X1-SW black, 6mm OD
122-8469	PUN-H-8X1,25-BL blue, 8mm OD
122-8458	PUN-H-10X1,5-BL blue, 10mm OD
122-8461	PUN-H-12X2-BL blue, 12mm OD

Rotary Knob Pneumatic Manual Control Valves

- Highly durable POM (polyoxymethylene) body material
- Maximum operating pressure of 10 bar
- Two ports, two positions
- Other sizes available (including versions for changes in hose diameter) on the RS web site
- Supplied and priced as a pack of 10



916-0968	6mm - 6mm
916-0962	8mm - 8mm
916-0971	10mm - 10mm

In-line Speed Controller with Push-In Fittings - Straight

- AS series inline speed controllers are lightweight and have the benefit of index plates to help identify points when multiple controllers are installed
- Can be mounted in four different ways
- Speed accurately controlled even at low velocity



LOCAL STOCK



748-0709	M5 body, 4mm tube OD
748-0703	M5 body, 6mm tube OD
748-0712	1/8 body, 6mm tube OD
748-0715	1/4 body, 6mm tube OD
748-0719	1/4 body, 8mm tube OD

3193 Series Tee Threaded Adaptors

- Materials with high resistance
- Durability of product and equipment
- 100% leak-tested in production
- Full bore for optimum flow



NEW



245-5189	G 3/8 Male, Push In 10 mm	3193 10 17
245-5188	G 1/4 Male, Push In 10 mm	3193 10 13
245-5190	G 1/4 Male, Push In 12 mm	3193 12 13

6 INDUSTRIES SEEING THE BIGGEST IMPACT FROM INDUSTRY 4.0



Agriculture

People who work in the agriculture sector know that many factors must go right for harvests to be successful. Things like bad weather and pests can make yields lower than expected for a given season. However, Industry 4.0 can remove some of the uncertain variables.

One project that uses artificial intelligence (AI) and satellite imagery in India can predict the crop yield by district, region or farm, even before harvesting occurs. Another option is to use drones for better pest management. The associated aerial images can allow farmers to only apply pesticides to the affected areas, getting results that are effective and better for the planet than their old methods.

A company called Root AI also lets farmers use a picking robot to harvest delicate produce, like tomatoes. The machine uses cameras to scan vineyards and detect ripeness before picking. The robot's proportions also mimic a 6-foot-tall person's arms. It also features a storage compartment that the picked fruits go into during operation.

Logistics

The logistics sector has also experienced an impressive impact from Industry 4.0. Figuring out the best ways to make operations more efficient helps everyone who receives the respective items or parcels.

In one example, DHL invested in a package-handling robot. Leaders hoped that the purchase would make the company's operations more scalable. Estimates indicate that the machine could tackle up to 800 boxes per hour.

The Internet of Things (IoT) has also caused massive improvements in logistics. Smart sensors can track a package through its supply chain journey and alert representatives to any possible issues. Imagine if a temperature-sensitive parcel was left in a warm environment. Workers who are warned about that mistake could contact the right people to correct the problem before the product spoils.



Life Sciences

The life sciences sector was not an early adopter of Industry 4.0. However, more investments are happening now, and the results are encouraging. One of the biggest benefits of using more smart technologies in a lab is that it leads to worthwhile workload shifts, giving people more time to focus on high-value duties. Pre-analytical processes, like slide staining, are typically the easiest to automate due to their simple mechanics. However, machine learning and smart image analysis make it easier to mechanize lab tests. Humans can verify whatever results the automated systems provide.

The rise of labs filled with Industry 4.0 technology has also led to facilities that people can operate from anywhere. The Lilly Biotechnology Center in California is an excellent example. It has space to keep 100 instruments and 5 million compounds.

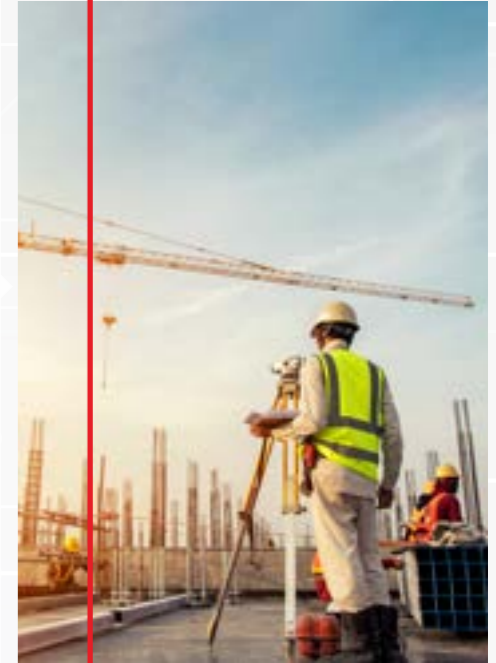
Cloud computing technology allows people to monitor and perform experiments from anywhere with an internet connection.

Construction

The construction sector is also in a great position to see a major impact from Industry 4.0. Many firms encounter challenges due to retiring workforces and the time required to train new people for the unfilled positions. Automation could reduce those issues. Digital twins are also valuable for helping project team members visualize buildings at various stages of construction. People can often see that data from anywhere, as long as they have active internet connections.

Leko Labs is a startup that aims to reduce the carbon footprint of buildings by replacing up to 75% of the concrete and steel currently used with a wood composite material. The company also uses robotics in its fabrication process, and pieces are fabricated off-site before getting transported to the construction area. Moreover, Leko Labs developed algorithms that can reportedly optimize and automate the construction process. It uses 50% fewer materials while improving a building's thermal and acoustic properties.

3D printing has helped the construction sector make substantial progress, too. A Dutch couple recently moved into the first 3D-printed home approved in Europe. One of the main advantages was that the structure only took 120 hours to build. Some companies have also made eco-friendly materials for these printers to use.



E-Commerce

The e-commerce market represents a steadily growing consumer segment. In 2014, the worldwide share of online sales in the retail market was only 7.4%. However, analysts believe it will reach nearly 25% by 2025. People who buy things over the internet typically expect increasingly fast shipping speeds. Some even want their items to arrive the same day they order them. Industry 4.0 technology can help with that expectation and other demands.

Global Fashion Group's Dafiti Group examined how automation could bring a smoother e-commerce experience to people in the Latin American market. The facilities' technologies allow processing up to 4,800 products per hour. The warehouse has 300 robots and 450,000 bins and uses a system that cuts order cycle time from 24 hours to two.

A startup called Urbx wants to do something similar with grocery automation, except decision-makers, there will focus on making the most of space in vertical structures. The Urbx automated system can operate in only 1,800 square feet of space and reach up to 150 feet high. Orders are ready an hour after they are placed. E-bikes are among the distribution methods used.

Manufacturing

No discussion of the impact from Industry 4.0 is complete without mentioning the manufacturing sector. Many of the world's leading factories combine numerous technologies to get the best results. Although doing that requires making substantial investments, it often pays off.

Experts say cost reductions for components such as cameras and sensors have made robots more affordable and practical for manufacturing environments. Those parts mean the machines can better understand their surroundings, work safely with humans, detect products on assembly lines and more.

Ericsson has created a 5G test factory to demonstrate what the future could look like if manufacturers embrace the new network.

The often-discussed low-latency feature of 5G could make it easier for facility leaders to connect multiple machines and have them work simultaneously to get tasks done faster. Similarly, 5G could help ensure people get accurate information about machine conditions and assembly line productivity.



Our Product Range

Over 650,000 products, more than 2,500 brands.

We offer a broad and extensive product range to support our industrial and electronics customers with 650,000+ stocked products, from over 2,500 suppliers – including our own brand, RS PRO.

A few of our most popular global and local brands



RS PRO

RS PRO is our own-brand product range of more than 65,000 high-quality, competitively priced industrial product and electronic components.

RS PRO offers customers a choice where the combination of quality, performance and price create exceptional value. All RS PRO products and components are backed by the RS Seal of Approval, representing leading industry standards for audit, inspection, test and certification.



rspro.com

Electronics Components, Power & Connectors

- Batteries & Chargers
- Connectors
- Displays & Optoelectronics
- Passive Components
- PCB Prototyping
- Power Supplies & Transformers
- Raspberry Pi, Arduino & Development Tools
- Semiconductors



Electrical, Automation & Cables

- Automation & Control Gear
- Cables & Wires
- Enclosures, Storage & Material Handling
- Fuses, Sockets & Circuit Breakers
- HVAC, Fans & Thermal Management
- Lighting
- Relays
- Switches



Mechanical Products & Tools

- Abrasives & Engineering Materials
- Adhesives, Sealants & Tapes
- Facilities Cleaning & Maintenance
- Fasteners & Fixings
- Hand Tools
- Plumbing & Pipeline
- Pneumatics, Hydraulics & Power
- Transmission
- Power Tools, Soldering & Welding



IT, Test & Safety Equipment

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- Facilities Cleaning & Maintenance
- Office Supplies
- Personal Protective Equipment & Workwear
- Security & Ironmongery
- Site Safety
- Test & Measurement



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Thermal Imaging Camera with Wi-Fi Connectivity

- Provides accurate, fast and reliable temperature measurement using infrared point and shoot technology and high-quality thermal imaging
- Superior image quality making the results easy to read, displaying critical temperature conditions



227-5213 -20 °C→+ 400 °C
230-9295 -20 °C→+ 150 °C
230-9294 -20 °C→+ 330 °C

Bluetooth Power Clamp Meter

- 10,000 count digital display
- 50 segment analogue bar graph
- Large LED backlit display
- Bluetooth connecting
- Auto store up to 1000 memories
- Data logging up to 9,999 records
- True RMS reading on AC and AC+DC mode



162-4455 Bluetooth Clampmeter

RS 135 Multi Function Calibrator

- Source 4~20 mA, 0~24 mA with 1 µA resolution (1 KΩ load, 24 V loop supply), basic accuracy 0.025%
- Source 0~24.000 V with 1 mV resolution
- Source frequency 1~20000 Hz square wave with programmable duty cycle (1~99%)
- Auto step and auto ramp for sourcing mA, V



174-9557 4-20MA Loop Calibrator & Thermometer

Hot-Wire Anemometer with Bluetooth

- Compact and robust design that offers accurate and reliable results and can be used across a variety of applications, making it an easy to use hand-held multi-purpose measuring instrument with user-friendly, easy to use control keys
- Ideal for measuring wind speed, airflow volume, temperature and humidity in a wide range of environments



220-7279 Hotwire

Network Tester

- Can test multiple cables such as: UTP, STP, Cat5E, Cat6, Cat6A and Coaxial cables
- Included toner probe helps with testing
- Locate and identify the distance of an open or short circuit No power supply needed. Just a 9V battery. Low battery indicator included



146-6833 F, RJ12, RJ45, 2670

Magnetic Field Indicator / Solenoid Tester

- Easy to use
- Powerful red light indicator
- Lightweight



375-5422 Magnetic Stick Field Indicator



Fine-tune your T&M equipment

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Whether it's existing equipment or a new purchase, you need to have confidence in the accuracy of your measurements. That's where our calibration service can help.

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- Fast turnaround and delivery**
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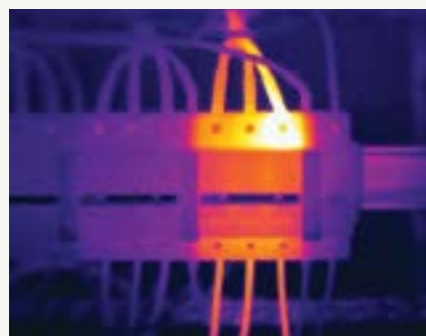
Learn more at au.rs-online.com/calibration or contact our team

FLIR SOLUTIONS CABINET INSPECTION



Infrared cameras can't see through glass or plastic and so Teledyne FLIR manufactures Infrared Windows made of a special material which allows an inspector to see into the cabinet through the IR window.

The Infrared camera can then find any potential issue or fault with the cabinet or equipment while its energized. IR Windows stay in compliance with NFPA 70E requirements and are Arc flash rated up to 63KA. They are quick and easy to install and support thermal, MSX® and visual inspections. These broadband IR crystal windows transmit short, mid, and longwave IR while also allowing illumination to shine through. When used together with FLIR Ex-series cameras it makes inspection quicker and easier, safer and more efficient and helps keep inspectors safe.



www.flir.com.au/ir-windows-au

FLIR Ex-series infrared camera with MSX & WiFi

- Easy to use: The FLIR Ex series cameras are fully automatic and focus-free with an intuitive interface for simple measurements in thermal, visual, or MSX mode.
- Compact and rugged: The FLIR Ex series cameras' low weight of 0.575 kg and the accessory belt pouch make them easy to bring along at all times.



184-6121	160 × 120 (19,200 pixels)	E5xt (Incl Wi-Fi)
184-6123	240 × 180 (43,200 pixels)	E6xt (Incl Wi-Fi)
184-6124	20 × 240 (76,800 pixels)	E8xt (Incl Wi-Fi)

U1733C Handheld LCR Meter

- 20,000 counts resolution
- 0.2% basic accuracy
- Wide LCR ranges
- Auto identification (Ai) automatically determines and displays component type and measurements
- Detailed component analysis



765-9586	20mF, 200 MΩ, 2000H	U1733C
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Testo 470 Optical & Mechanical Tachometer

- Can be operated with one hand, and offers a combination of optical and mechanical rpm measurement
- By attaching an adapter for a probe tip or a speed disc, the optical measurement becomes a mechanical one, allowing speeds and lengths to be measured
- For optical measurements, simply attach a reflective marker to the measurement object, point the visible measurement spot at the reflective marker, and measure



327-6395		
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LOCAL STOCK

IntelliTone™ Pro 200 LAN Toner and Probe Kit

- Reject noise and false signals
- Locate the correct cable bundle
- Isolate a cable within the bundle, despite cable bleed
- Tests for continuity
- Identify and diagnose 10/100/1 Gb Ethernet link connectivity with NIC / hub indication



LOCAL STOCK

831-8996	IntelliTone™ Pro 200	MT-8200-60-KIT
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MIT515 Insulation Tester

- 10 TΩ (5 kV) / 20 TΩ (10 kV) max. insulation resistance
- Timed IR plus PI and DAR diagnostic tests
- Operate with dead battery when on line power/mains
- Rapid charge Li-ion battery – up to 6 hrs continuous testing (5 kV)



LOCAL STOCK

765-9586	5000V, 10TΩ, CAT IV	1001-938
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2000 Series Oscilloscopes

- Benchtop performance in pocket-sized scope
- Simple, cost-effective solution
- Fast real-time sampling rates
- Equivalent-time sampling (ETS) mode
- Built-in arbitrary waveform generator
- Advanced digital triggers



793-3654	2 Channel, 10MHz	PICOSCOPE 2204A
111-6771	2 Channel, 50MHz	PICOSCOPE 2206B

LOCAL STOCK

LOCAL STOCK

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GETTING REAL WITH THE INTERNET OF THINGS

The Industrial Internet of Things (IIOT)-the concept of interconnected applications, equipment, and technology- is more than just an abstraction. The IIOT is the idea that connections between the digital (e.g., mobile devices and computers) and physical worlds (e.g., plant equipment and test equipment) improves information exchange.

The practical applications of IIOT to plant operations may not seem clear at first, but when compared to more traditional methods of tackling operational challenges at the plant, the advantages become evident.

One way to understand the key differences is to compare two approaches to three-phase motor failure -- smart technology versus traditional analysis.

In this method, two liquids are injected into a moulding tool surrounding an aluminium die-cast body. The mixed liquids cure inside the mould, thereby creating a solid coating of polyurethane (PU) that forms on the housing.

THE PROBLEM: THREE-PHASE MOTOR FAILURE

As often happens, a plant faces a problem motor, one that has been replaced twice in the past six months. Finding the root cause of motor failure is the task at hand.

After finding that the insulation in the windings is breaking down, the technicians at the service shop think the motor might be running hot.

They are not sure if it is being caused by electrical power quality problems, mechanical wear or environmental or operational stresses that degrade the motor performance.

It's therefore determined that a team is needed to collect current, voltage, power quality and temperature measurements in order to isolate the fault and identify the root cause.

THE SOLUTION: USING SMART TECHNOLOGY THAT COMMUNICATES BETWEEN PLANTS, EQUIPMENT, AND EMPLOYEES

- Individual measurements: Using wireless tools that are networked to data systems and each other, across employees and work sites, can create a trend of volt and current measurements over time.
- Discrepancies between phases are quickly identified as occurring at certain times of day, therefore ongoing logging is deemed unnecessary.
- Temperature readings: Data on temperatures have been logged and stored and are easily pulled down by the techs so they have a baseline with which to compare infrared temperature measurements of the motor, relevant to ambient conditions and potential operational stresses.
- Holistic picture of three-phase motor failure: Even with a computerized maintenance management system (CMMS) in place, isolating key variables and correlating with voltage, current, and temperature is easier with a networked series of tools, all with access to trend data.
- Addressing problems with the right solution: Unlike traditional methods that might fail to identify the root cause, having real-time access to data, communication between team members and plant equipment, the IIOT philosophy of management reaches conclusions faster. As a result, a plant can operate more efficiently, potentially preventing complete equipment failure, and unnecessary equipment replacement.



While the concept of Industrial Internet of Things might seem an overly vague abstraction that applies only to Silicon Valley types, the practical application of networked tools with real-time access to data and enabled virtual communication between equipment, laptop, phone, and other technology, makes clear this isn't the case.

As the example above demonstrates, building a solid maintenance program with the right smart tools anticipates and addresses equipment failures before disastrous shut downs and unplanned equipment failure. As such, greater efficiencies and pinpointed root cause allows for a faster, simpler management of plant equipment and operations.

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Fluke Acoustic Imagers

- 7 inch 1280 x 800 LCD with capacitive touchscreen
- Blended live SoundMap™ with visual image
- Lower utility costs, reduce leak detection time and improve reliability in your production line
- Do more with the same air compressors – delay the capital expense of purchasing an additional compressor

LOCAL STOCK



FLUKE

187-6163 2kHz to 50kHz, 0.5m to > 70m

ii900

187-6163 2kHz to 100kHz, 0.5 m to 120 m

ii910

Fluke 1770 Series Three-Phase Power Quality Analysers

LOCAL STOCK

- Automatically measure power and power quality parameters
- At-a-glance power quality health for faster troubleshooting
- Easily view V/A/Hz, power, dips, swells, and harmonics data
- Capture high-speed transients up to 8 kV



FLUKE

232-0535

FLUKE-1777

232-0533

FLUKE-1775

232-0531

FLUKE-1773

Fluke 810 Vibration Meter

LOCAL STOCK

- On-board identification and location of most common vibration mechanical faults reducing downtime.
- Fault severity scale with four severity levels helps you prioritise maintenance work
- Repair recommendations advise technicians on corrective action
- On-board context-sensitive help provides real-time tips and guidance to new users



FLUKE

744-2192

FLUKE 810

Fluke 117 Handheld Digital Multimeter

LOCAL STOCK

- VoltAlert Technology for integrated non-contact voltage detection AutoVolt feature for automatic AC/DC voltage selection
- LoZ: Low input impedance to eliminate stray voltage
- Large white LED backlight



FLUKE

616-1460 10A ac 600V ac

FLUKE 117 EUR

Fluke Insulation Resistance Testers

LOCAL STOCK

- Designed for fast-measurement, faster & stable resistance reading with higher efficiency
- It has automatic calculation of polarization index and dielectric absorption ratio
- Its low power design meets the requirements of high-intensity work up to 1300 times of 2500 V measurement and up to 6500 times of 250 V measurements



FLUKE

241-3116

FLUKE-1537/APAC

241-3115

FLUKE-1535/APAC

Fluke Ti480 PRO Thermal Imaging Camera

LOCAL STOCK

- 640 x 480 infrared resolution
- Increased sensitivity to visualise temperature differences
- More intuitive visual interface, improved, user-tested, touch screen interface
- Get 4x the pixel data with SuperResolution, which captures multiple images and combines them to create a 1280 x 960 image



FLUKE

171-6857 640x480 Resolution

FLK-TI480 PRO 9HZ

Why PPE expertise reduces risks for manufacturers



Richard Graham
Industry Sector Manager, RS

“Making sure that people get home safely every day is uppermost in all we do,” says Ray Robinson of his thirty years in the PPE sector. The last twelve were spent as sales director at Liscombe, the heavy industry PPE specialist that is now part of the RS Group.

Here Robinson and Richard Graham, Industry Sector Manager for Original Equipment Manufacturers (OEMs) and Heavy Industries at RS, share insights into how working with suppliers who have experience of providing PPE to OEMs can help these businesses to mitigate a variety of risks.

This includes services as well as products. A supplier who offers value-added solutions such as managed inventory services, for example, does not just help an organisation to achieve more efficiency in terms of Maintenance, Repair and Operations (MRO) or even business operations more broadly – although both are important.

Such services play an important role in ensuring workplace safety too. The 1,300 senior indirect procurement professionals who contributed to the RS Components and Chartered Institute of Procurement and Supply (CIPS) Indirect Procurement Report 2021: From Disruption to Recovery stated that managed inventory services provided visibility of stock

and spend (68%) and improved productivity (42%). However, they also reported these services resulted in better working practices (41%), accessible provision of PPE (40%) and better on-site safety with less walking (32%).

Before exploring mitigation, though, it is vital to establish the level of risk to workers.

Fatal injuries within manufacturing

According to the Health and Safety Executive (HSE), 142 people died in workplace accidents in Britain in 2020-21. Of this number, there were 39 deaths in construction followed by 34 in agriculture, forestry and fishing, and 20 in manufacturing. Analysis of data across a five-year period reveals that manufacturing has a fatal injury rate around 1.5 times that of the average for all industries.

Whatever the figures and trends, however, there is rightly a demand to always be improving health and safety provision. As Richard Jones, Head of Policy and Regulatory Engagement at the Institution of Occupational Safety and Health (IOSH), points out, “Lower figures are no comfort at all to those who have lost loved ones... That is why we must continue to reduce that number further.”

Furthermore, Jones also points out that fatality rates are only one aspect of the issue. “These workplace deaths are only ever the tip of an iceberg of health and safety failure,” he says, “with further work-related road deaths and over 13,000 people dying each year from disease cause by work exposures.

“We encourage employers to ensure that they are managing the safety and health risks in their workplaces. No one should have their life cut short by work.”

PPE is the last resort

While PPE has a vital role to play in managing health and safety risks, the priority must be eliminating hazards. As Ruth Wilkinson, head of health and safety at IOSH, stated in a recent interview, “PPE can be absolutely crucial in preventing serious harm from coming to workers. Over the years, it has prevented many a serious injury, or ill health, and worse.

“But businesses should continue to risk assess and follow the hierarchy of control to ensure that the most appropriate risk controls are in place to eliminate harm and protect people.”

“PPE should be regarded as the last resort”

The Health and Safety Executive

Guidance from the HSE reiterates the same message. “PPE should be regarded as the last resort to protect against risks to health and

safety,” reads its latest advice on PPE regulations. “Engineering controls and safe systems of work should be considered first.”

The HSE continues with a summary of the hierarchy of controls mentioned by Wilkinson: “Consider controls in the following order, with elimination being the most effective and PPE being the least effective:

- Elimination – physically remove the hazard
- Substitution – replace the hazard
- Engineering controls – isolate people from the hazard
- Administrative controls – change the way people work
- PPE – protect the worker with personal protective equipment.”

Sharing best practice

Robinson sees this hierarchy of controls being put into practice. “The heavy industries we work with engineer out the need for PPE,” he says. “In some areas, you’re seeing a decline in hearing protection because the machines are being better encapsulated. In terms of respiratory protection, there’s now better extraction.”

This affects what businesses want from their PPE suppliers. “As a result, our customers want us to support them more as consultants, bringing to them the best available products for their needs,” adds Robinson.

Being able to share experiences from other organisations is a crucial part of this: “Their health and safety people may have only held that one position, but our area managers have seen the same risk in other situations and can share best practice for reducing potential hazards.” Graham agrees.

“We’ll tell customers what has worked well for another customer in their sector and offer them a trial,” he explains. “Plus, best practice can transfer across sectors too.”

“Best practice for managing PPE is knowledge that can be transferred to other sectors”

Richard Graham
Industry Sector Manager, RS

Robinson shares an example of this. “Beards are very fashionable but ensuring that a mask fits well over facial hair is hard,” he begins. “We tried one that provides good respiratory protection even with a beard at a steel manufacturer and the wearers liked it, making the site more compliant. We’re now sharing this information with customers in the automotive and utilities sector as well.”

Protecting employees, protecting equipment

When you’re involved in supplying essential PPE, you become as invested in ensuring worker safety as those with in-house responsibility do. “Making sure that people get home safely every day is uppermost in all we do,” says Graham. “People’s safety is paramount for us, just as it is for health and safety managers.”

“People’s safety is paramount for us, just as it is for health and safety managers”

Richard Graham
Industry Sector Manager, RS

You also understand the level of protection that PPE provides for the specialist equipment built by OEMs. “For some OEMs, it’s about reducing risk to the product from the operator too,” observes Graham. “For instance, with wind turbines, there’s lots of sensitive electronic equipment that might need protecting from the end user.”

Mitigating supply chain risks

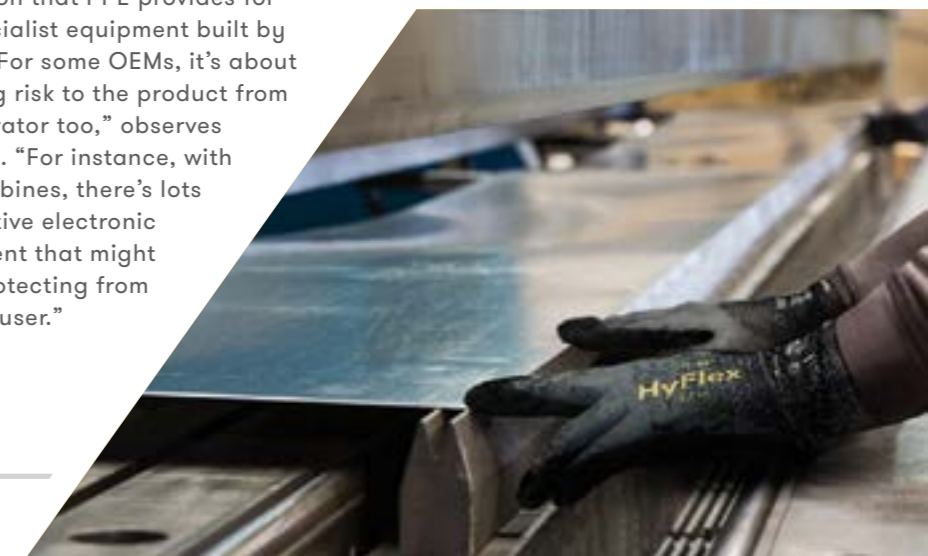
Those with experience of supplying PPE to OEMs are aware of how important it is to ensure stock is in the right place at the right time too. “If a business doesn’t have the necessary PPE available, it can lead to a stoppage in production, the consequences of which can run into thousands of pounds,” says Robinson.

“We’ve been through so much in the last few years with COVID and then supply chain issues,” agrees Graham. “We’re doing everything we can to mitigate any ongoing supply chain risk. We’ve invested to increase our stockholding and we’re placing forward orders with suppliers to help them plan as well.”

Expertise is again vital. “We’re also trying to ensure we have approved alternatives available if there is a worst-case supply issue,” explains Robinson. “Again, being a specialist helps because our buyers are specialists too. They’re not buying a glove one day and a spanner the next. They’ve always buying PPE and know the market well.”

“With RS acquiring Liscombe,” concludes Graham. “We added all of that knowledge and expertise to our own, making RS incredibly well placed when it comes to provision of PPE for hazardous workplaces such as OEMs.”

Discover how Liscombe and RS combining can offer your business a total PPE supply solution, backed by proven industrial experience.





Smoke Detector Tester

LOCAL STOCK

- The CRC Smoke Test conveniently tests the functional ability of a smoke detector
- It can be sprayed while standing on the floor eliminating the need to climb ladders or chairs
- It is ideal for residential or commercial detectors and is safe and easy to use and a short 3 second burst of CRC Smoke Test is all it takes



238-7762 1m Maximum Reach

2105

Electrician's Lockout Kit



- An essential addition to any electrical tool kit, this starter kit is from our high-quality own brand RS PRO
- Offering lockouts for energy source, breakers, electrical plugs, wall switches, MCB's, fuses and much more for worker protection
- Designed for multipurpose locking, the kit features 27 different products for optimal safety, all neatly stored in a tough carrying case



862-5244 27 products

Impact Protector

- Angles protection for protecting people, vehicles or equipment
- Ideal for warehouses, factories, parking
- Double Adhesive backed tape
- Nitrile Butadiene Rubber doubleface tape for fixing oil and grease resistant
- High visibility



Warning Sticker for CCTV Surveillance

NEW

- Warns people that the building has an active CCTV Surveillance System
- Printed on both sides to enable fixing onto glass
- Reflective
- Weather-resistant
- Available in two sizes
- A notice on CCTV surveillance is a legal requirement for areas that are open to the public



724-9794 30mm x 30mm



214-414 1m Maximum Reach

AU1312

Industrial First Aid Kit

NEW

- Complies with Safework Code of Practice 2012 for Workplaces
- Certified to: ISO 13485
- TGA Approved AUST L 142658
- Australian Manufactured
- Rugged, lightweight plastic case
- Keeps contents secure and free of dust
- Ensures workplace compliance
- Ideal for industrial environments



241-5321 Workplace First Aid Kit

FWP824H

Electrical Safety Mat

LOCAL STOCK

- Maximum operating voltage 1000 V ac
- Insulating mat class 0
- Made from elastomer
- Light weight
- Colour Grey
- Various sizes available



918-2482 600mm x 1m x 1.5mm

TTCL0 0,6X1

Ansell

HyFlex® 11-561

- The INTERCEPT yarn provides high cut protection while providing dexterity and comfort
- The palm coating design improves grip, extends glove life in abrasive conditions and allows the hand to breathe
- The glove is silicone free which prevents the transfer of silicone contaminants to metal parts prior to painting
- The Oeko-Tex certification guarantees that the glove does not contain any harmful substances such as DMF and other chemicals



234-8222	Size 5 (Bag of 12)	11561050
234-8223	Size 6 (Bag of 12)	11561060
234-8224	Size 7 (Bag of 12)	11561070
234-8225	Size 8 (Bag of 12)	11561080
234-8226	Size 9 (Bag of 12)	11561090
234-8227	Size 10 (Bag of 12)	11561100

Ringers Super Hero Yellow Work Gloves

NEW

- Knuckle TPR design with two detached fingers for flexibility
- Durable synthetic leather palm for enhanced grip
- Split-fit padded palm for comfort
- Reinforced thumb, index, and middle finger tips for durability
- Secure cuff closure with hook and loop TPR pull tab
- Wrap around index finger protecting wear and tear zone



223-3777	Size 8	161-08
223-3778	Size 9	161-09
223-3780	Size 10	161-10
223-3781	Size 11	161-11
223-3782	Size 12	161-12
223-3783	Size 13	161-13

Nitrile Orange PF Disposable Gloves

NEW

- Powder free Nitrile Disposable gloves, non-medical grade, non-sterile, single use.
- On-line Chlorinated for easy put on and take off with textured finger tips for good grip.
- Ambidextrous with beaded cuff.



235-2911	Small	41135
235-2912	Medium	41136
235-2913	Large	41137
235-2914	XL	41138
235-2916	XXL	41139

TROJAN PVC Gloves

NEW

- Made out of premium polyvinyl chloride (PVC)
- Extremely flexible with seamless cotton liner
- Resistance against many acids, oils and chemicals
- Double dipped, plus triple layered between thumb and forefinger
- Rough grip palm, wet and dry grip and reusable
- Protection against



235-2955	9 (Bag of 12 Pairs)	41560
235-2956	10 (Bag of 12 Pairs)	41561
235-2957	Size 11 (Bag of 12 Pairs)	41562

Rig-Lizard Thin Lizzie safety glove

NEW

- Purpose-built to provide maximum grip in tough situations with over five grip options for water, oils, muds, and lubricants
- Each glove is launderable and also equipped with our highly flexible, keeping hands protected from smash and pinch injuries.
- Sandy nitrile palm coating provides superior grip and abrasion resistance



Sizes: 5+/XXS to 12/3XL





Blundstone 997 Unisex Zip-up Safety Boot

- 7 eyelet lace up with lace locking device
- Convenient heavy duty zip with zip fastener
- Moulded TPU bump cap for added leather protection
- Padded tongue and collar
- Thermal regulating bamboo lining



LOCAL STOCK



Search '997' or scan QR code for sizes

Blundstone 892 Women's Water resistant nubuck lace up/zip ankle safety boot

- The #892 safety boot has been designed specifically for women, offering optimum fit, support, comfort and protection.



LOCAL STOCK



Search '892' or scan QR code for sizes

3 x-flow Unisex Toe Capped Safety Shoes

- The full leather upper and heat



NEW



Sizes 37 - 48 (4 - 13)

Blundstone 795 Toe Capped Lightweight Safety Shoes

- Black breathable nylon upper uniform safety jogger
- Rubber outsole heat resistant to 140°
- Designed for lightweight comfort
- Elasticated laces with normal lace option
- Airport friendly
- Broad fitting composite toe cap



LOCAL STOCK



Search '795' or scan QR code for sizes

Torque Range Safety Boots

- The easy access ZIP closure of the FORCE ZIP makes it ideal for workers exposed to sparks, working around water or required to remove their boots multiple times a day
- The ScuffCAP improves durability to ensure that the boots comply with standards for as long as possible



NEW



241-8632 UK 6, EU 40
241-8634 UK 7, EU 41
241-8640 UK 10, EU 44

MK0FORCEZHFF060
MK0FORCEZHFF070
MK0FORCEZHFF010

Stimela 'Superintendent' Black Gumboot with Safety Toe & Midsole

- Top quality PVC/nitrile blend sole for comfort & durability
- Ultra high grade virgin PVC upper
- Steel Toe AND Steel Midsole for added safety
- Reinforced shin area to protect against knocks and bumps and painful ankle roll-overs
- Resistant to oils, grease, acids, fats and animal by-products



NEW



Scan the QR Code to view our range

MP5 Hazguard coverall

- Designed for protection against hazardous substances and contamination of both product and personnel.
- Made from a breathable microporous fabric with stitched seams for extra strength



LOCAL STOCK



235-2983	M (Box of 25)	51308
235-2984	L (Box of 25)	51309
235-2985	XL (Box of 25)	51310
235-2986	XXL (Box of 25)	51311
235-2988	XXXL (Box of 25)	51312

MP4 hazguard coverall

- Certified for protection against biological hazards and infective agents.
- Made from breathable microporous fabric, with stitched and taped seams creating a waterproof seal.



LOCAL STOCK



235-3000	M (Box of 25)	51631
235-3001	L (Box of 25)	51632
235-3002	XL (Box of 25)	51633
235-3004	XXL (Box of 25)	51634
235-3005	XXXL (Box of 25)	51635

Inherent FR PPE2 2 tone D/N coveralls

- 230gsm ripstop weave 61% modacrylic, 30% cotton, 5% para-aramid, 3% A100 tencel, 1% anti-static inherent FR fabric
- Two way radio loops, concealed center open front with two-way FR nylon zipper



LOCAL STOCK



Sizes : 77R-112R, 92S - 132S

RS PRO Hi Vis Vests

- Warsaw executive vest waistcoat
- High visibility
- Reflective tape marking - increased visibility
- Contrast panels for dirt protection
- Made from 100% Polyester
- Warp knit 125 g
- Front zip opening
- Phone and pen holder pocket
- Radio loop allows the attachment of a radio



Scan QR Code to see our range

HiVis Breathable Waterproof Rain Jackets

- Stylish 300D heavy duty polyester/PU, seam-sealed, waterproof outer shell, 2 flap side pockets, mesh lining, foldaway hood.
- Storm cuffs with adjustable sleeve tabs, mobile phone pocket, reflective tape front and back



LOCAL STOCK



Sizes: S - 6XL

Anti-static Drill Pants with 3M R/Tape

- 311gsm heavyweight cotton drill 3M 8906 reflective tape.
- Heavy duty nylon zip.
- *Orange Only is Day/Night*
- *Navy Only is Night Design



LOCAL STOCK



Sizes : 72R-107R, 87S-132S, 74L-94L



RS PRO 88 Piece VDE Approved Electricians Tool

- This versatile tool kit has VDE certified screwdrivers and pliers, individually tested for use up to 1000 V ac
- The kit also contains additional extras including sockets, spanners, bit sets, extension bars, hex keys, insulated screwdrivers and VDE pliers in various sizes ensuring that you are covered for a range of applications



734-8885 88 Piece

Heavy Duty Engineers Bench Vice

- S.G. Ductile Iron construction guarantees high-impact resistance, increased strength and long life operation
- Integrated Anvil for efficient striking of workpieces when required
- Safety Stop system prevents the slide from being separated from the body



145-7899 115mm

T8434

3 Piece Chrome Vanadium Steel Spanner Set

- Quicker turning of fastener from the ratcheting action with 4 sizes per spanner.
- Easier to use in confined spaces with 5 degree operating angle.
- Simple direction reversal with switch operation.
- Less wear of fastener due to the 12 point Dynamic Profile™



713-3790 3 Piece

S4RM/3T

RS PRO Aluminium 4-way Control Cabinet Key

- Multifunctional tool - convenient and easy to use on many utility systems
- Unique adapter that converts to an emergency screwdriver
- 8 different key types
- Solid die-cast construction
- Double-ended screwdriver bit with PH1 and 1 x 7mm Slotted ends
- Adaptor attached to create a pocket screwdriver



841-7005 4 Way

Stanley Nylon Backpack with Shoulder Strap

- Made from heavy-duty 600 x 600 denier fabric for long-lasting and extra durability
- 50 Pockets/tool holders for a wide variety of tools, including longer tools on the side such a level
- Removable dividers system with tool holders is easily detachable, with handle for easy carriage



706-4711 360mm x 270mm x 460mm

1-95-611

216 Piece Maintenance Tool Kit with Case

- An extremely comprehensive set that offers all the accessories you will ever need for making large holes, drilling and driving screws
- This kit ensures all your fasteners and fittings will be presented with a professional finish every time



458-1913 216 Piece

P-4404

Heavy Duty Cobalt Jobber Drill Set

- Industrial quality for drilling materials that have high hardness and tensile strength such as cast iron, bronze, hardened steel & stainless steel.
- 135° split point (drills > 2mm & 3/32) enables accurate positioning and less drilling pressure
- Thick core for increased rigidity in hard materials



204-3775 Imperial, 29 pieces, 1/16 to 1/2 x 1/32 rises D109S3

204-3776 Metric, 25 pieces, 1.0 to 13.0mm x 0.5mm rises D109SM3

Drill and Tap Set

- High performance taps and drills designed for use with most materials
- Featuring A002 drills with Titanium Nitride tip coating that minimises wear, increases tool life and allows increased performance and self-centring point for excellent positional accuracy
- Hand machine taps compliment the set in sizes M3, M4, M5, M6, M8, M10, M12



787-8986 14 Piece

L115101

Zyklop Speed Ratchet Socket Set

- 29-piece Zyklop socket and ratchet set delivers top quality performance and contains the most popular sockets, a selection of bits and extensions plus a 3/8" ratchet
- Chrome Vanadium sockets are suitable for manual and non-impact machine use
- Multi-component ratchet handle is ideal for use in a confined spaces due to the



812-6270

004046

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204-3862 7.0MM

D1080700

204-3864 8.5MM

D1080850

204-3847 10.0M

D1081000

204-3848 13.0M

D1081300

Tool Organiser

- The Never Let Go small hand tool tethering kit provides a solution for all small hand tools, whether pliers, nips or knives
- The NLG adjustable wristband is a quick and easy anchor point and, with the short lanyard, avoids the frustration of snagging due to the very compact setup
- Self-fusing tether tape provides an instant tether point



233-4351 Hand Tool Tethering Kit

101558

18V Cordless Impact Driver

- Die-cast aluminium for reduced weight and maximum durability
- Square drive anvil with hog-ring for quick and easy socket change
- LED work light
- Anti-Marring bumper protects tool and work surface from damage
- Glass filled nylon body to withstand automotive fluids
- One hand forward and reverse lever



878-3154 18V

SCMT90000



SmartWasher®
BIOREMEDIATING Parts Washing System

BE SAFE BE SMART

PROTECT YOUR TEAM AND
THE ENVIRONMENT



**BONUS BLUETOOTH
SPEAKER**

Purchase any CRC SmartWasher + Start-up Kit and receive
a **BONUS JBL Xtreme 3 Bluetooth Speaker!***

*Speaker subject to availability - substitutions may be required with comparable product. Fluids in start-up kit vary depending on machine purchase. Promotion only valid for purchases made between 01/07/2022 and 30/09/22. Terms & conditions apply.

**VALUED AT
\$398! AUD**

THE PERFORMANCE ADVANTAGE



It works! CRC SmartWasher® is effective, even on the toughest carbon, grease, gunk and oils.

THE COST ADVANTAGE



When you compare traditional parts washers against the CRC SmartWasher®, the savings are clear.

THE SAFETY ADVANTAGE



A CRC SmartWasher® delivers exceptional cleaning without any of the health risks associated with solvent and aqueous-based parts washers.



WWW.CRCIND.COM.AU



5.56 Multi-purpose

- 5.56 is a multi-purpose product with superior penetrating power that breaks through rust and corrosion while it clears away scale and dirt
- Lubricates for smooth action, and silences annoying squeaks and squeals

LOCAL STOCK



238-7805	400g	5005
238-7806	4L	5006
238-7803	1L	5004

Penetr8

- Penetr8 is an industrial strength, low viscosity lubricant and penetrant designed to quickly loosen and free seized, bound or frozen fasteners
- It quickly permeates rust, scale, gum, grease and corrosion with a low surface tension formula that creeps into cracks, seams, threads and joints with great efficiency

LOCAL STOCK



238-7833	400g	5501
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Food Grade Bio Degreaser

- Food Grade Bio Degreaser is an extra heavy duty cleaner formulated to penetrate and dissolve tough grease, oil and contaminants for easy removal – safely
- Offers next-generation high performance cleaning technology that is pH neutral, safe on surfaces, users and the environment

LOCAL STOCK



238-7871	750ml	FG05167
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Brakleen

- Brakleen is formulated to quickly and safely remove brake fluid, grease, oil and other contaminants from brake linings, pads, drums and callipers
- Selected solvents, controlled evaporation, low surface tension and high density ensure superior cleaning and degreasing properties and can even lift and remove oil and grease that has already penetrated linings

LOCAL STOCK



238-7825	500 g	5089
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Zinc Range

- High-quality range of zinc aerosol products including Zinc It, Bright Zinc and Black coloured zinc products
- CRC Zinc products can be used on structural steel, roofs, welding seams, storage tank transformers, power generation equipment and much more

LOCAL STOCK



238-7749	Grey, 400ml	2085
238-7750	Silver, 400ml	2087
238-7751	Black, 400ml	2089
238-7752	White, 400ml	2090

NF Contact Cleaner

- NF Contact Cleaner is a revolutionary, technically proven, stable, no flash point, and non-flammable, inert high purity cleaning solvent
- NF Contact Cleaner is non-conductive, non-corrosive and non-staining
- It has rapid- complete evaporation and contains no lubricants

LOCAL STOCK



238-7738	400 g	2017
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Shop online au.rs-online.com



Kleenex® foam hand sanitiser

- Fragrance and dye free formulation kills up to 99.999% of germs.
- Dermatologically tested formula contains aloe vera and skin humectant.
- "Fit for purpose" in food handling or processing areas.



LOCAL STOCK

237-7017	1l cartridge, 6 per case	6492
226-4198	Aquarius White skincare dispenser	69480

Wypall® X60 Perforated Jumbo Roll Wipers

- The Kimberly Clark WYPALL X60 perforated jumbo roll wipers a versatile wiper that is durable enough to handle general cleaning tasks and strong enough to scrub off adhesives, remove oil and debris
- Strong wiper construction ensures longer lasting wiper performance, maintaining strength wet or dry



LOCAL STOCK

226-4110	Roll of 1100	34965
226-4179	Mobile Jumbo Roll Dispenser	4951

Heavy Duty Plastic Bin Bags

- From RS PRO, comes a range of high-quality bin bags. Manufactured to industry standards these plastic disposal bags have been designed for an array waste disposal solution
- High tensile strength 40 mu Tri-ex blend film



771-6572	50 x Black Bin Bag, 80 → 90L
771-6569	50 x Yellow Bin Bag, 110L
771-6563	50 x Black Bin Bag, 90L

Complete Cleaning Kits

- Ideal solution for all cleaning applications within a wide range of environments.
- The cleaning kit offers a one-stop bundle that has a mop and bucket set, as well as a dustpan and brush for general purpose cleaning within domestic, commercial and industrial areas



201-3598	Yellow
201-3599	Blue
201-3596	Red

BRUTE Bins

- Features innovative solutions for making refuse collection and storage more efficient.
- Innovative venting channels make lifting out liners up to 50% easier, improving productivity and reducing the risk of injury.
- Proprietary design constructed with the highest quality material plus a UV inhibitor ensures long life in even the most extreme commercial environments



LOCAL STOCK



230-8231	121.1L	FG263200GRAY
146-2786	167L	FG264360GRAY

Mobile Janitorial Cart

- Preassembled locking security hood speeds up assembly and ensures all products will be secure
- Secure cabinet doors keep cleaning supplies concealed from view and locked up when carts are unattended



NEW



241-1757	129L, 3 Shelf	1861427
615-7247	230 V ac, Amber	E2XB05AC230B1R1B/A

Hazardous Areas Tagging Kit **NEW**

- All-in-one portable bulk roll of tags with cable ties for quick attachment
- Pick your quantity. Choose from 100 or 250 tags per roll
- Long-lasting identification you've come to expect from Brady



237-0546	White on Red, 100 Tags	150501
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Cubitron II Ceramic Cut-Off Wheel **NEW**

- Engineered to cut faster and last longer than competitive ceramic products
- 3M Precision Shaped Grain is self-sharpening, runs cool and optimises mineral breakdown for extra-long life
- Rigid, reinforced resin-bonded wheel slices through almost all materials



234-7774	125mm Diameter, 254µm Grit	7100094901
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Black Reclosable Fastener **NEW**

- Designed to bond to many plastics
- Stem density: 400 stems/in² = 62 stems/cm²
- Closure cycle life > 1 000
- Good initial adhesion
- Quick and easy to install
- Durable



240-5895	24.4mm x 41.14 m	7100108755
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Circlip Kits

- Stainless steel clips conform to DIN 1.4122 and BS3673
- Supplied in compartmented storage box, complete with a layout sheet giving dimensional information
- Kit 1: shaft diameters : 2.25 - 12mm, 4 - 16mm, 8 - 12mm
- Kit 2: shaft diameters: 13 - 20mm, 14 - 25mm



278-360	Kit 1 890-piece
278-376	Kit 2 450-piece

3M Packing Tape **NEW**

- Rubber resin adhesive sticks quickly to a variety of materials, including fiberboard
- High edge tear and split resistance ideal for general industrial applications
- Polypropylene backing with synthetic rubber adhesive delivers conformability under stress
- Resists edge tears and splits to help keep contents secure



241-1311	66m x 50mm	3M 371 50mm x 66m
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Cold Shrink Tubing **LOCAL STOCK**

- Easily installed
- Suitable for various cable sizes
- Torches or heat not required
- Good thermal stability
- Tight seal
- Resilience and pressure remain consistent after years of ageing and exposure



307-831	Black 30.1mm	804150
307-847	Black 20.9mm	804130









Making Amazing Happen for a Better World

RS Group is at the heart of the global industrial sector. We provide products and service solutions that help our customers design, build, maintain, improve and protect their equipment and operations. Every day, we help our customers make amazing happen for a better world – from enabling innovative solutions to keeping businesses, critical industries and communities running.

We are committed to being a strong and sustainable business and bringing our people, customers, suppliers and communities together to accelerate our positive impact. We are determined to leverage our global scale and innovative product and service solutions to advance sustainability and improve lives. By doing so, we know we can play a key role in helping to address some of the world's biggest challenges; from tackling climate change, to building engineering and innovation skills and championing diversity and inclusion.

To make this happen, we're introducing For a better world - our 2030 action plan to support a more sustainable and inclusive world. We've set four global goals by 2030 focused on: advancing sustainability; championing education and innovation; empowering our people; and doing business responsibly.



 <p>1. ADVANCING SUSTAINABILITY</p>  <p>We are developing sustainable operations and product and service solutions</p>	 <p>2. CHAMPIONING EDUCATION AND INNOVATION</p>  <p>We are building skills and fostering innovative solutions that improve lives</p>	 <p>3. EMPOWERING OUR PEOPLE</p>  <p>We are creating a safe, inclusive and dynamic culture where our people can thrive and grow</p>	 <p>4. DOING BUSINESS RESPONSIBLY</p>  <p>We ensure the highest ethical standards throughout our business and global value chain</p>
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SUPPORTING SIX UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS



 [Learn more at au.rs-online.com/esg](https://au.rs-online.com/esg)