CC PRO-A adaptor wireless kit





product description

The CC PRO-A is a next-generation wireless adapter kit designed specifically to upgrade existing CC1 load cells for rod pump applications in the oilfield. Engineered around the core principles of Performance, Reliability, and Optimization, the CC PRO-A converts traditional wired CC1 installations into fully wireless systems, providing exceptional accuracy, dependable wireless performance, and streamlined system efficiency.

Designed to withstand harsh field conditions, the CC PRO-A integrates seamlessly with the robust, hermetically sealed stainless steel construction of the existing CC1 load cell. The adapter module features integrated position sensing, eliminating the need for additional sensors or cables. Its encrypted wireless transmission and energy-efficient electronics guarantee secure data, robust signal integrity, and extended battery life of 12–18 months.

To further simplify installation, control, and maintenance, the CC PRO-A pairs seamlessly with CC Connect, a free app available for smartphone, tablet, or PC. CC Connect provides real-time insights, wireless performance tuning, and secure firmware updates—maximizing uptime even in remote locations without cellular coverage.

applications

Rod pump control (polished rod load cell)

accessories

Magnetic mount, post mount for the base unit, antenna extension kit





key features

Compatible with most wired POC load cells

UL approved and FCC approved

Range of 100–1,000ft (30–300m)

100 readings per second

Position sensing capability

Battery life of 12 to 18 months

High signal strength & encryption

Environmentally protected to IP67

CC Connect app benefits

Real-time system insights

Wireless performance tuning

Secure diagnostics and updates



specifications

Typical values for the CC1 or CC3 load cell

Maximum capacity (E _{max})	lbf	30k or 50k
Excitation voltage	V _{DC}	+5 to +10
Rated load output	mV/V	2.00 ± 0.5%
	mA (optional)	4-20
Nonlinearity	% FS	± 0.25
Hysteresis	% FS	± 0.25
NonRepeatability	% RO	±0.1
Static Error Band	% FS Max	± 0.50
Compensated Temperature Range	°F (°C)	-13° to 149° (-25° to 65°)
Safe Operating Temperature Range	°F (°C)	-70° to 175° (-55° to 80°)
Temperature Effect on Zero	%RO/°F Max	± 0.0075
Temperature Effect on Output	%RO/°F Max	± 0.005
Zero Balance	% RO Max	± 3
Safe, axial load	% Capacity Max	200
Deflection at Capacity	inch nom	0.005
Load cell weight	lb nom	4.5
Fatigue Rating (compression)	Cycles Min @ Capacity	50,000,000
Shock Rating	g	Up to 500g
Vibration Rating	MIL-STD-810G	514.6; 516.6
Sensor construction	-	17-4 PH Stainless Steel
Protection according EN60529	-	IP67 or higher

electronics

Remote & base transceiver units paired	MAC ID	Unique 32-bit paired address
Data-rate	Readings/sec	100
Radio frequency (Load cell RF)	GHz	2.405 to 2.470
Radio frequency (Wi-Fi)	GHz	2.412 to 2.484
Radio Channels	Selectable (*)	14
Telemetry Range (Line-of-sight)	Feet (Meters) (*)	100 - 1000 (30-300)
RF Power Output- Remote Unit	dBm (*)	15.5dBm (max)
RF Power Output- Base Unit	dBm (*)	17dBm (max)
Battery Life (at 100sps)	-	12 - 18 months**
Battery Type	Remote Battery	(TL-5930/F) Lithium D Cell, 3.6VDC, 19Ah
Housing Material	-	Grivory GV-5H (Glass reinforced plastic)

(*) 2-3dBm; Telemetry range will change according to site RF Channel Settings

(**) Battery Life changes as per RF output; latency; Temperature; antenna distances etc. Refer to manufacturer for details.

specifications cont.

base unit

Power Supply	V _{DC} , mA	12 - 24 ; Min. 250mA
External Ref. (Virtual Excitation) Voltage	V _{DC}	4.8-10.1
Virtual Bridge Resistance	Ω	700
Housing Material	-	Die-cast Aluminium

POS output - accelerometer / position pulse

Output type	-	Raw accelerometer or position pulse
Voltage range	V _{DC}	0 to +5
Current (max out)	mA	10

POS SW open-drain output

Output type	-	Inverted
Pull-up resistance	Ω	10k (typically)
PU supply range	V _{DC}	+4.5 to +24
Sink current	mA	100

product dimensions (mm)



The dimensions drawing illustrates the CC PRO-A wireless adaptor coupled with the CC1 load cell. Dimensions may vary when used with other compatible load cells.

wiring (base unit)

Wiring connections for base unit as follows. Load cell powered by battery. See user manual for full details.

Caution! Only the remote unit is intended to operate in the hazardous zone.

Power cable

Black	Ground
Yellow	Shield
Red	12 to 24VDC

Signal cable

Red	Vref +
Green	Sig +
White	Sig -
Black	Vref -
Yellow	Shield
Gray	Position +
Violet	Position –

CC Connect app

The CC Connect app extends the performance of the CC PRO by putting real-time control, configuration, and diagnostics in the palm of your hand. Available free of charge from the App Store, Google Play, and the Microsoft Store, the app enables full wireless access to your system—no cell service or wired connection required.

Designed for use on smartphones, tablets, and PCs, CC Connect provides a secure, field-ready interface for setting up, monitoring, and maintaining CC PRO systems.

key features

Real-time visibility of system health and signal strength

Error alerts and summarized diagnostics

Wireless tuning to optimize performance and battery life

Secure firmware updates and diagnostics via encrypted link

Password-protected admin access for settings and configuration



Specifications and dimensions are subject to change without notice.

