



SPECTRUM C O N T R O L S

Industrial I/O | Gateways | Micro800™ | PowerFlex® | Marquee Displays



Since 1983, Spectrum Controls has continued to be the premier provider of complementary hardware and related software products for the industrial controls marketplace. Our partnership with Rockwell Automation began in 1990 and has steadily grown ever since.

Corporate headquarters is located in Bellevue, Washington.

Garrett Edwards – Senior Product Manager
Randy Maes – Application Engineer

Multi-Protocol Gateways



- 12 protocols all in one box
- 3 and 5 port options
- Multiple protocols communicating simultaneously

I/O Modules



- Fully licensed Rockwell Automation technology on virtually every PLC
- 1st level global support provided by Rockwell TechConnect

Industrial Message Displays



- Easily integrates with:
 - Rockwell Automation Controllers
 - Allen Bradley
 - Siemens
 - Schneider Electric PLC's via SC's comms module
- Supported through Rockwell TechConnect



Universal Industrial Gateway

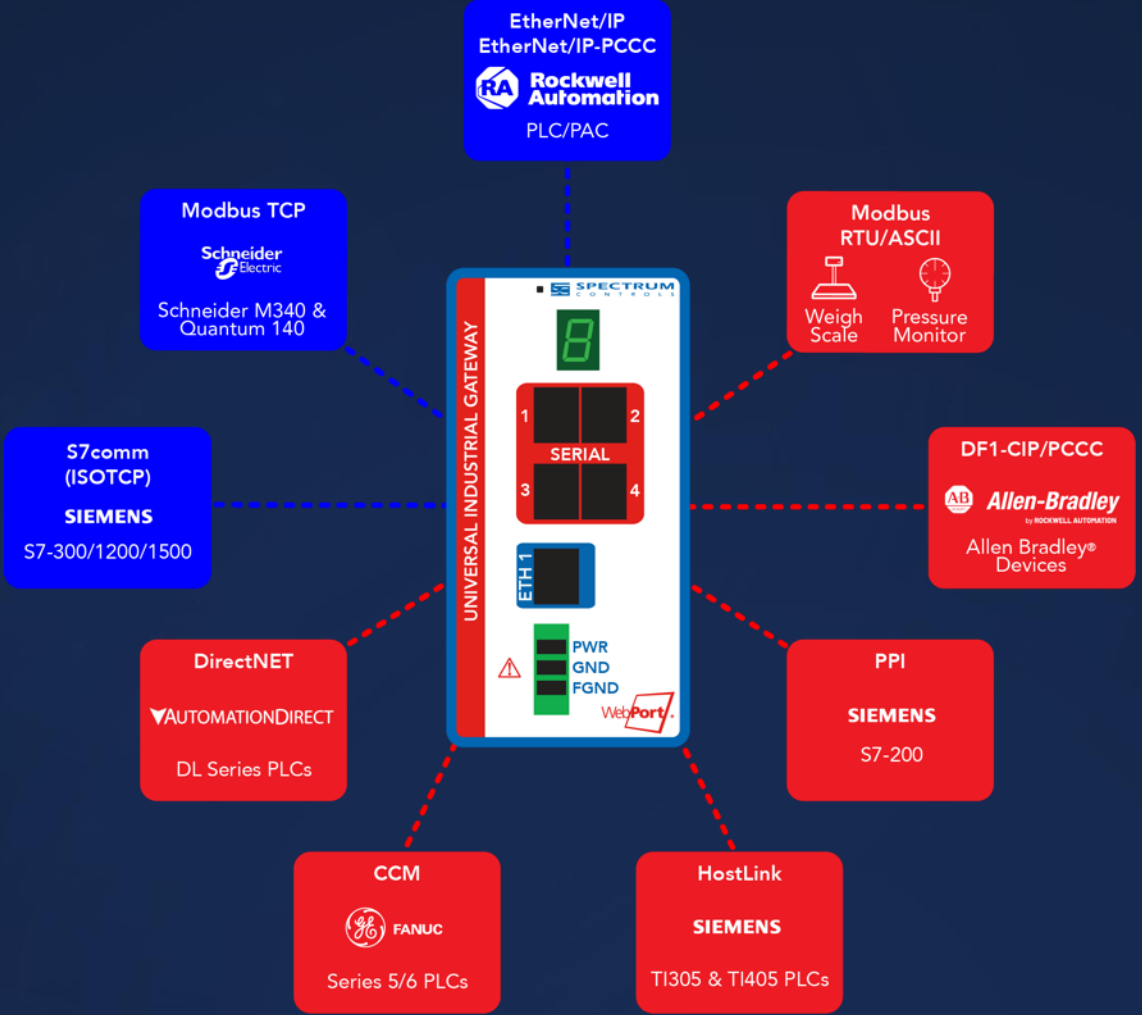


- Single solution for connecting multiple devices, across multiple protocols, simultaneously
- Transfer data to and from any port, in any combination
- Brings the connected enterprise to all devices

72 Protocol Combinations in one box.

		Serial Protocols										Ethernet Protocols	
		DF1-PCCC	DF1-CIP	PPI	HostLink	DirectNET	CCM	Modbus RTU	Modbus ASCII	Modbus TCP	EtherNet/IP-PCCC	EtherNet/IP	S7comm (ISOTCP)
Serial Protocols	DF1-PCCC	Grey	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
	DF1-CIP	Grey	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
	PPI	Grey	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
	HostLink	Grey	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
	DirectNET	Grey	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
	CCM	Grey	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
Ethernet Protocols	Modbus RTU	White	White	White	White	White	White	Red	Red	Blue	Blue	Blue	Blue
	Modbus ASCII	White	White	White	White	White	White	Red	Red	Blue	Blue	Blue	Blue
	Modbus TCP	White	White	White	White	White	White	Red	Red	Blue	Blue	Blue	Blue
	EtherNet/IP-PCCC	White	White	White	White	White	White	White	White	Grey	Blue	Blue	Blue
	EtherNet/IP	White	White	White	White	White	White	White	White	Grey	Blue	Blue	Blue
	S7comm (ISOTCP)	White	White	White	White	White	White	White	White	White	White	Grey	Blue

 66 Protocol to Protocol Combinations.
 6 Slave to Slave Protocol Combinations.



Universal Industrial Gateway at a Glance...

Ethernet Interface	
Protocols (Master only):	EtherNet/IP, EtherNet/IP-PCCC, ModbusTCP, S7comm
Number of Ports:	1
Speed:	10/100 Mbps full-duplex
Connector:	8-pin RJ45
Serial Interface	
Protocols (Master only):	Modbus RTU, Modbus ASCII, DF1-CIP, DF1-PCCC, PPI, DirectNET, CCM, HostLink
Number of Ports:	2-port or 4-port option
Serial Standards:	RS-232/485
Connectors:	8-pin RJ45
Supported PLC Types	
Controllers:	Rockwell Automation ControlLogix, CompactLogix, MicroLogix, Micro800, SLC 500, PLC-5 Schneider M340 & Quantum 140 Siemens S7-200/300/1200/1500, SIMATIC TI305 & TI405 Automation Direct DL05, DL06, DL205, DL305, DL405 GE Series Five & Series Six
Features/Configurable Parameters	
Tag Pairs	100 tag pairs/map (max)
Tag Maps:	50 (max)
Data Types: (Protocol Dependent)	SINT, INT, REAL, BOOL, STRING, SHORT (SIGNED 16 BIT), USHORT (UNSIGNED 16 BIT), DINT (SIGNED 32 BIT), UDINT (UNSIGNED 32 BIT), ARRAY
Formatting:	Byte-Swap, Word-swap, Straight copy

Universal Industrial Gateway Product Matrix

Part Number	Serial Ports	Ethernet Ports	DF1-PCCC	DF1-CIP	PPI	DirectNET	CCM	HostLink	Modbus RTU	Modbus ASCII	EtherNet TCP	EtherNet/IP-PCCC	EtherNet/IP	S7comm (ISOTCP)	List Price
WP-G-221-P1	2	1				✓	✓	✓	✓	✓	✓	✓	✓		\$650
WP-G-221-P2	2	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	\$850
WP-G-241-P1	4	1				✓	✓	✓	✓	✓	✓	✓	✓		\$950
WP-G-241-P2	4	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	\$1,150
WP-G-UPG-P2	Field upgrade your P1 to add all P2 protocols													\$299	

A Better Way to Gateway...

Communications made easy

- Single solution – Twelve protocols, five ports, one box.
- No PLC programming – No Ladder Logic to program. No I/O changes required.
- Configurable – Transfer data to and from any port, in any combination, using any available protocol.

Easy-to-use

- Browser based configuration – No programming software to buy or install.
- Intuitive navigation – Consistent configuration for any protocol.
- Context-sensitive Help – Built-in, fully searchable with images and step-by-step instructions, only one click away.

Cost effective

- Cost competitive – The functionality of multiple gateways for the price of one.
- Multiple serial ports – Maximum device connectivity (*RS-232 and RS-485*).
- Field upgradable – Ability to add protocols (*via firmware upgrade*).

What are the benefits of purchasing a Universal Industrial Gateway

- Control time and cost of integration
- Increase asset lifecycle and availability
- Reduce maintenance costs and downtime

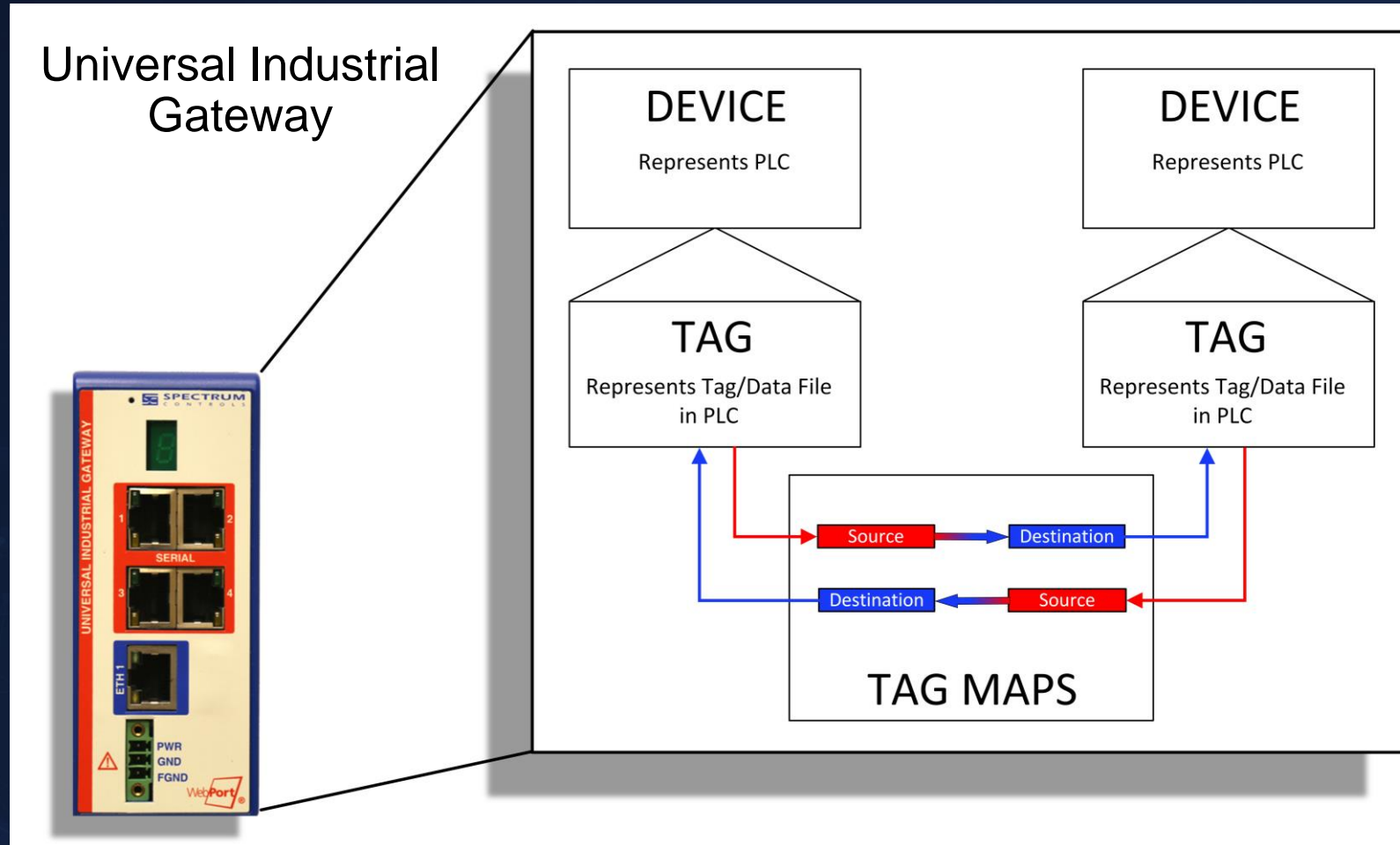
Comments from the field:

- Modernize your networks and retain your legacy devices
- Put legacy devices back to good use
- Control what you upgrade and when you upgrade
- Control the migration from one brand to another
- Integrate a machine where you cannot modify the PLC ladder code
- Ensure your machine integration in any factory
- Get up and running faster with a single solution Gateway
- Reduce training costs with a single solution Gateway

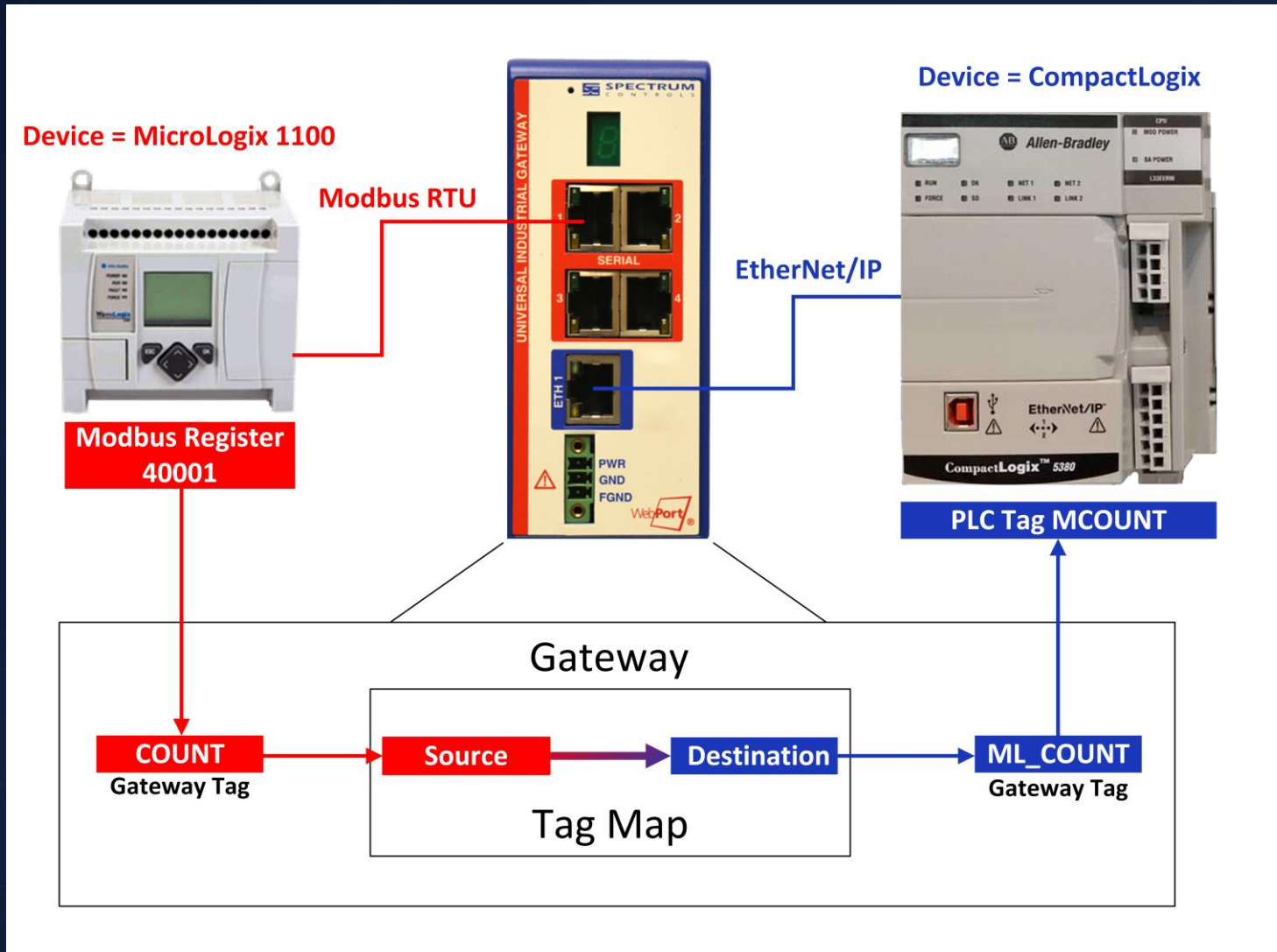
Basic Operation:

- **The Gateway's three components:**
 - **Devices**
 - Represents a PLC connected to the Gateway.
 - **Tags**
 - Data files within the Gateway linked to PLC Tags or Data files.
 - **Tag Maps**
 - Mechanism used to move data from one PLC to another.

Basic Operation:



Basic Operation:




A couple of quick notes:

- Network configuration
 - The Gateway's IP address must match the Subnet Mask of the PLC it will be connecting to.
 - If the PLC's IP address is "192.168.10.10" then the Gateway's IP address must be "192.168.10.nnn" where "nnn" is something other than "10" or "255".

A couple of quick notes:

- Serial ports
 - The default configuration for the serial ports is 19.2Kbaud, 8/N/1, No handshaking and RS232.
 - If your application will be using serial ports make sure the port configurations match.

A couple of quick notes:

- Context Sensitive Help
 - Each configuration page has a Blue question mark  in the upper righthand corner. Clicking on this brings up a help page that is related to the page you are on.

Devices

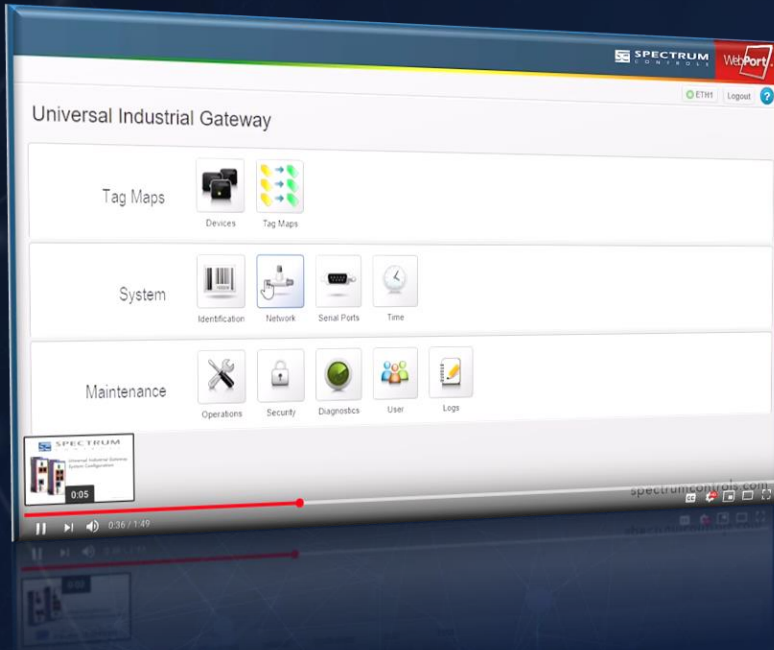
Name	Protocol	Connection	Address	Slave Id / Slot Number
\$System	local	local		
\$User	local	local		

Tags

Name	Description	Data Type	Address
No records found			

Gateway Tutorial Videos

1. Initializing the Universal Industrial Gateway
2. System Configuration
3. Adding Devices and Tags
4. Creating Tag Maps
5. Maintenance and Diagnostics



[YouTube.com/SpectrumControls](https://www.youtube.com/SpectrumControls)

Thank you!



Spectrum Controls, Inc

1705 132nd Ave NE
Bellevue, WA 98005

spectrum@spectrumcontrols.com

Tel: 425-746-9481

Fax: 425-641-9473

www.spectrumcontrols.com