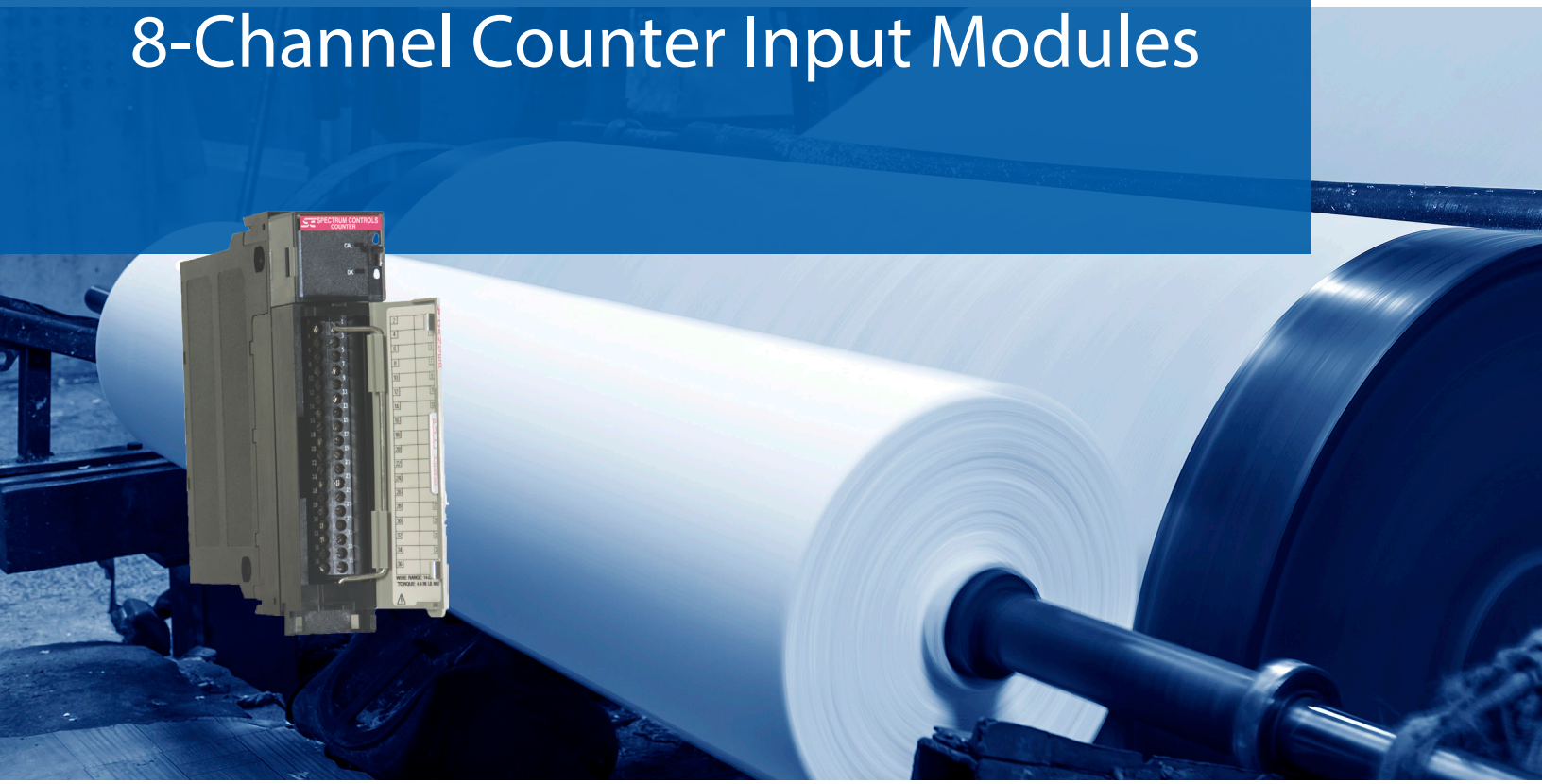
ControlLogix™

1756sc-CTR8
8-Channel Counter Input Modules



The 1756sc-CTR8 Module provides counter input capability for general purpose counter and turbine flowmeter applications that need a large number of input channels in one I/O module. The 1756sc-CTR8 module can replace counter input modules without compromising performance or price.

Reduce System Costs

- Eight incremental, 24-bit, single-ended counters or up to four pairs for up/down or quadrature counters.
- Configure each input group as 5, 12, or 24 VDC, or 50, 200 mVpp counters, or as turbine flow (variable reluctance coil) AC inputs; input signal range is from 0 to 65 kHz.
- Provides scaling K factor for turbine flowmeters; can be setup for flowmeter proving requirements.
- For counting applications, can count incremental inputs up to 65 kHz.
- Four external counter enable lines for faster counter control.
- Provides scaling of input counts or input frequency to engineering units.
- Simultaneous frequency/counter display; Limit and zero flags to detect rollover, roll-under.
- Count direction flags; start, stop, reset, and preset control.
- Count and rate measurements may be multicast to other processors at intervals as short as 10 ms.

1756sc-CTR8 Specifications

Input Types	8, single-ended counter inputs, or 4 quadrature encoding 8 enable control line inputs			
Input Ranges	AC 50 mVpp	AC 200 mVpp	5 VDC	12/24 VDC
VIL	-50 mV	-200 mV	1 V	6 V
VIH	+50 mV	+200 mV	3.5 V	10.5 V
Vmax (CE)	±50 VAC RMS	±50 VAC RMS	±50 VDC	±50 VDC
Counter Speed (AC/DC inputs)	0 Hz to 65 kHz			
Input Frequency (AC/DC inputs)	1 Hz to 65 kHz			
Minimum Pulse Time	5.4 us			
Isolation Voltage	2550 VDC field wiring to backplane for 1 second			
Input Impedance	24 kOhms at 24 V, typical (voltage dependent); >1 Mohm at 3 V			
Counter Voltage Input	Programmable 5 VDC, 12/24 VDC; 5 mVAC, 200 mVAC			
Channel Update Time	<13 ms for all channels			
Count Value Range	0 to 16,777,215			
Low Range	±34 K			
High Range	±8 M			
Backplane Current Maximum				
5 V	230 mA			
24 V	75 mA			
Environmental Conditions				
Operational Temperature:	-0 °C to 60 °C (32 °F to 140 °F)			
Storage Temperature:	-40 °C to 85 °C (-40 °F to 185 °F)			
Relative Humidity	5% - 95% (non-condensing)			
Power Dissipation	4.8 Watts, maximum			
Certifications	UL/cUL Listed ANSI ISA 12.12.01 (Class I, Div 2, Groups ABCD), CE			
Weight	490 g (17.3 ozs)			
Recommended Cable	14 AWG stranded maximum; 3/64 insulation maximum			

SPECTRUM CONTROLS
425-746-9481
www.spectrumcontrols.com
1705 132nd AVE NE | Bellevue | WA 98005
spectrum@spectrumcontrols.com