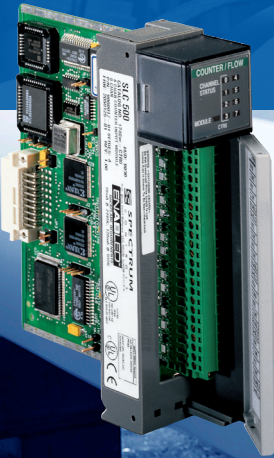


SLC 500™

1746sc-CTR8

8-Channel Counter Input Module



The 1746sc-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 1746sc-CTR8 module can replace counter input modules without compromising performance or price.

Reduce System Costs

- Eight incremental, single-ended counters or up to four pairs for up/down or quadrature counters.
- Configure each input group as 5, 12, or 24 VDC counters, or as turbine flow (variable reluctance coil) AC inputs.
- Includes scaling K factor for turbine flowmeters.
- Can be setup for flowmeter proving requirements.
- For counting applications, can count incremental inputs up to 50 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; Up/down flags to alert when a preset limit is reached.
- Over range flag when count or frequency exceeds preset limit.
- Start, stop, reset, and preset control.

1746sc-CTR8 Specifications

Input Types	8 single-ended counter inputs, or 4 quadrature encoding or 4 enable control line inputs			
Input Ranges	AC 0-30 VP	5 VDC	12 VDC	24 VDC
VIL	-50 mV	1 V	3 V	5 V
VIH	+50 mV	3.5 V	9 V	13 V
Vmax (CE)	±75 V	±75 V	±75 V	±75 V
Vmax (UL)	±100 V	±100 V	±100 V	±100 V
Counter Speed (AC/DC inputs)	0 Hz to 50 kHz			
Input Frequency (AC/DC inputs)	1 Hz to 50 kHz			
Minimum Pulse Time				
DC Mode	8 us			
External Enable/Disable	Enable and disable setup time is 20 us			
Isolation Voltage	1000 VDC field wiring to backplane			
Input Impedance	25 kohms			
Counter Voltage Input	Programmable 5 VDC, 12 VDC, 24 VDC, 0-75 VAC			
Channel Update Time				
Counter Mode	6 ms per channel			
Frequency Mode	6 ms per channel			
Count Value Range				
Low Range	±32 K			
High Range	±8 M			
Accuracy				
Counter Mode	±1 Count			
Voltage (INI4vi only)	±1% at 50 kHz; 0.0002% at 1 Hz			
Backplane Current Maximum				
5 V	225 mA			
24 V	125 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	Relative Humidity: 5% - 95% (non-condensing)			
Power Dissipation	1.75 Watts, maximum			
Certifications	UL/cUL Listed ANSI ISA 12.12.01 (Class I, Div 2, Groups ABCD) CE per 89/336/EEC for EMC			
Recommended Cable	14 AWG stranded maximum; 3/64 insulation maximum			