

ControlLogix^R

1756sc-IF8U/1756sc-IF8UK 8-Channel Universal Analog Module



The 1756sc-IF8u/1756sc-IF8UK Input Modules provide full universal analog capability in one I/O module. The 1756sc-IFU8K Input Module is conformally coated. The 1756sc-IF8u modules can replace analog input, thermocouple, and RTD modules without compromising performance or price.

- Eight voltage, current, thermocouple, or RTD/resistance inputs (2-, 3-, or 4-wire).
- 32 input types.
- Use any combination of input types at one time.
- Accuracy comparable with dedicated analog modules.
- Individually programmable for each channel; user scaling; time stamping and alarms.
- Easy to configure using ladder register settings or RSLogix programming software.
- Channel-selectable filtering for fastest analog update time and noise rejection.
- Cold junction compensation included for thermocouples.
- 4-wire support for RTDs.
- Removal and Insertion Under Power (RIUP).

1756sc-IF8U(K)

Specifications



Input Types	8 V, C, TC, or 8 RTD/Res										
Input Ranges Thermocouple RTD Resistance Current Voltage	J, K, T, B, E, R, S, N, C PT385/3916, Ni618/672, NiFe518, Cu426 250, 500, 1000, 2000, 3000, 4000 ohms 0-20 mA, 4-20 mA ±50 mV, ±150 mV, 0-5 V, 1-5 V, 0-10 V, ±10 V										
Resolution	16 to 21 bits (filter dependent) bits										
Advanced Features	5 filter frequencies (individually selectable by channel)										
Accuracy	Better than 0.1% of range at 0 °C to 25 °C										
Update Times (ms) * 8-Channel Sample Time (sec) * with TC/RTD, update times may be longer. Update times do not include autocalibration time	<table border="1"><thead><tr><th>10 Hz</th><th>50/60 Hz</th><th>100 Hz</th><th>250 Hz</th><th>1000 Hz</th></tr></thead><tbody><tr><td>0.99</td><td>0.19</td><td>0.13</td><td>0.07</td><td>0.04</td></tr></tbody></table>	10 Hz	50/60 Hz	100 Hz	250 Hz	1000 Hz	0.99	0.19	0.13	0.07	0.04
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Electrical Isolation (continuous)	12.5 VDC channel-to-channel isolation 1000 VAC field-wiring-to-backplane 1000 VAC field-wiring-to-chassis-ground										
Input Impedance	>1 Mohm; thermocouple, voltage, RTD <250 ohm, current										
Input Overvoltage Protection	14.5 VDC continuous; 250 W pulsed for 1 ms										
Input Overcurrent Protection	28 mA continuous; 40 mA, 1 ms, pulsed, 10% duty cycle, maximum										
Backplane Current Required	230 mA at 5 V maximum , 75 mA at 24 V maximum										
Common Mode Rejection	96 dB at 50/60 Hz										
Normal Mode Rejection	64.5 dB at 50/60 Hz										
Environmental Conditions Operational Temperature Storage Temperature Relative Humidity	-0 °C - 60 °C (32 °F - 140 °F) -40 °C - 85 °C (-40 °F - 185 °F) 5% - 95% (non-condensing)										
Thermal Dissipation	3.00 Watts, maximum										
Weight	380 g (13.4 ozs)										
Recommended Cable	For TC inputs: shielded, twisted-pair TC extension wire; For mV, V, or mA inputs: Belden 8761 or equivalent For RTD inputs: shielded Belden 9501, 9533, or 83503										
Conformal Coating	ANSI/ISA 71.04.2013 G3 Environment Standard										
Certifications	UL/cUL Listed ANSI ISA 12.12.01 (Class I, Div 2, Groups ABCD), CE, ATEX, UKCA, CCC, CMIM										