

Quad Loop Powered Isolator QLPI731

DESCRIPTION

The QLPI731 is a four channel loop powered isolator that combines signal isolation and conversion in one compact package. Using SMD (Surface Mount Device) technology the QLPI731 offers an economical solution combining a range of options with accuracy and flexibility. Due to its width of only 15mm per channel and the 35mm DIN-Rail mounting the QLPI731 is ideal for "nestmounting" in field enclosures or as a "space saver" in larger control cabinets. The base unit features selectable process inputs, range changing is achieved using internal solder pads. Standard output is 4 - 20mA with a wide supply range of 7.5 to 38Vdc enabling 12V battery supply in automotive applications. Double surge protection is standard with all series 700 loop powered transmitters to prevent failure due to spikes induced by DC switched inductive loads. Final calibration is trimmed using internal zero and span trim adjustments. Front mounted LEDs verify the function of each channel.



General Specifications

Mounting:	35mm DIN-Rail.
Termination	Plug-in screw terminals.
Weight:	0.300 kg.
Protection class:	IP40 (IP65 Enclosure optional.)
Size:	60W x 70H x 110D (mm).
Housing material:	ABS, aluminium.
Calibration accuracy:	<0.2%.
Linearity:	<0.1%.
Long term drift:	<0.10%.
Ambient operating temperature range:	-10...+65°C.
Temperature drift error:	0.01% per °C.
Supply voltage:	7.5 - 38V continuous.
Load for 4 - 20mA output:	$RL \max = \frac{SupplyVoltage - 7v5}{0.02A} \Omega$
Load change effect:	0.1% up to RL max.
Response time:	500mS (5mS selected using internal solder pad).
Input impedance:	51 Ω (20mA), >1M Ω (1V), >5M Ω (5V), >10M Ω (10V).
Overload continuous: (Zero suppression/elevation)	500% of rated input.
Internal Zero adjustment	±1%
Internal Span adjustment:	±2%
Noise immunity:	130dB CMRR.
Input/output isolation:	>2kV r.m.s.
Electromagnetic compatibility:	AS/NZS 4251.1 (EN 50081.1)

Ordering code: **QLPI731 - X X X X X 0**

Output All Channels: _____

1 = 4 - 20mA

Input 1: _____

Input 2: _____

Input 3: _____

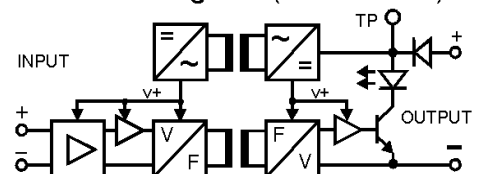
Input 4: _____

Codes for inputs 1 to 4

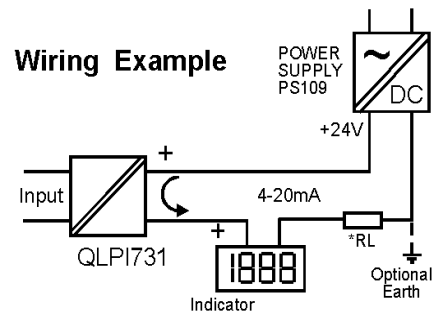
- 1 = 4 -20mA (default)
- 2 = 0 - 20mA
- 3 = 0 - 1V
- 4 = 0 - 5V
- 5 = 1 - 5V
- 6 = 0 - 10V
- *) 9 = Other specify

Use document CP73110 to change input range

Block Diagram (one channel)



Wiring Example



1	2	3	4	5	6	7	8
-	+	-	+	-	+	-	+
IN CH1				OUT CH2			
A.P.C.S.							
QUAD ISOLATOR							
CH3				CH4			
-	+	-	+	-	+	-	+
IN CH3				OUT CH4			
9	10	11	12	13	14	15	16

*) Price Extra..

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