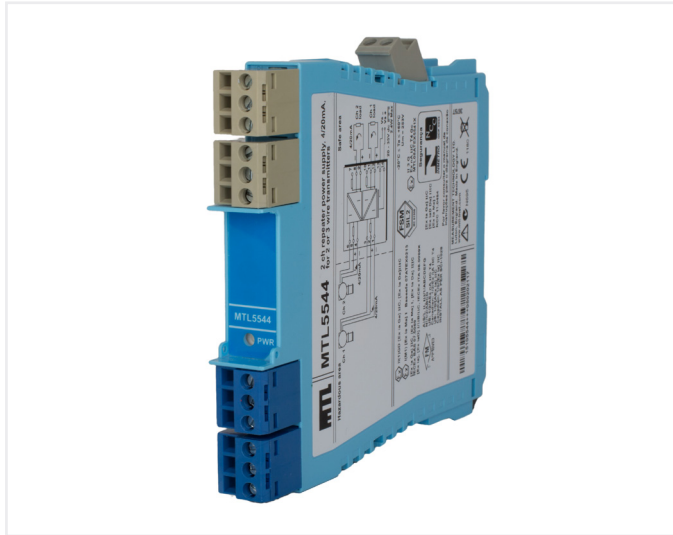


5544 Repeater Power Supply

2 Channel Isolation Barrier with Repeater Power Supply, 28 V max, 93mA max



The MTL 5544 is a dual channel repeater power supply for 2 or 3 wire 4 to 20mA transmitters located in a hazardous area. The MTL 5544 is also HART transparent which allows 2-way HART communication for 2-wire transmitters installed in the hazardous area.

Terminal	Function
1	Ch1 Current Input
2	Ch1 Transmitter supply +ve
3	Ch1 Common
4	Ch2 Current Input
5	Ch2 Transmitter supply +ve
6	Ch2 Common
7	Ch2 Output +ve via 220Ω for HART apps.
8	Ch2 Output -ve
9	Ch2 Output +ve
10	Ch1 Output +ve via 220Ω for HART apps.
11	Output -ve
12	Output +ve
13	Ch1 Supply -ve
14	Ch1 Supply +ve

Specification

Number of Channels	Two
Location of Transmitter	Zone 0, IIC, T4-6 hazardous area if suitably certified Div. 1, Group A hazardous location
Safe-Area Output Under/Over-Range:	Signal range: 4 to 20mA 0 to 24mA
Safe-Area Load Resistance	0 to 360 Ω @ 24 mA 0 to 450 Ω @ 20 mA
Current Sink:	600Ω max.
Safe-Area Circuit Output Resistance:	> 1 MΩ
Safe-Area Circuit Ripple	< 50µA peak-to-peak
Hazardous-Area Input	Signal range: 0 to 24mA (including over-range)
Transmitter Voltage:	16.5V at 20mA
Transfer Accuracy at 20°C	Better than 15µA
Temperature Drift	< 0.8µA/°C
Response Time	Settles to within 10% of final value within 50µs
Communications Supported	HART (terminals 1 & 2 and 4 & 5 only)
LED Indicator	Green: power indication
Maximum Current Consumption	96mA at 24V (with 20mA signal)
Power Dissipation Within Unit	1.4W @ 24V dc (with 20mA signal)

Safety Description

Terminals 2 to 1 and 3 and 4 to 6: $V_o = 28\text{ V}$, $I_o = 93\text{ mA}$, $P_o = 651\text{ mW}$, $U_m = 253\text{ V rms or dc}$

Terminals 1 to 3 and 4 to 6: Simple apparatus $\leq 1.5\text{ V}$, $\leq 0.1\text{ A}$ and $\leq 25\text{ mW}$; can be connected without further certification into any IS loop with an open circuit voltage $< 28\text{ V}$

