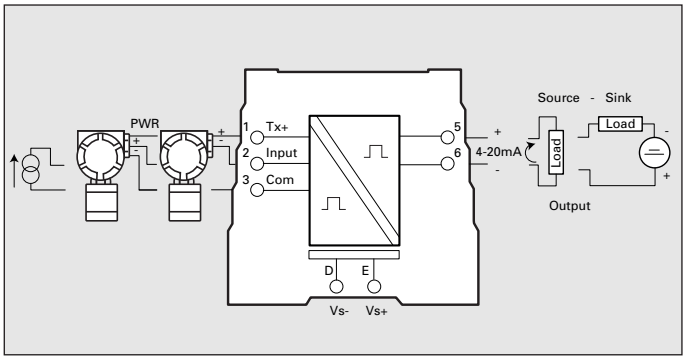
MTL1142 Transmitter Power Supply

1 Channel, Smart for 2/4-wire transmitters

The **MTL1142** is a Single Channel Analogue Input isolator with current source or current sink output (switch selectable). HART communication is provided for Smart two wire transmitters. The transmitter can be interrogated either from the operator station or by a hand-held communicator (HHC).
Power for this module is supplied via the power bus embedded in the DIN rail.
The PBUS6.2 kit must be ordered separately. 10 x 2 way power clips are provided to power 20 modules.
The **MTL1991** is used to feed power onto the bus.



Terminals	Function
1	Tx+
2	Input
3	Common
5	Output + (with HART)
6	Output - (with HART)
D	Power supply -ve
E	Power supply +ve

SPECIFICATION see also common specification	
Number of channels	One, with 1 fully floating output
Location of Transmitter	Safe area
Input and output signal range	4 to 20mA Output current source or sink, switch selectable
Under/Over-range	<3.0mA to >23mA
System output load resistance (source mode)	@ 20mA: 0 to 440Ω @ 24mA: 0 to 360Ω
Power supply voltage	18V to 32V DC
Output voltage (field power supply)	≥16.5V at 20mA
Transfer Accuracy at 20 °C	Transmitter powering mode: < ±20µA
Temperature drift	<2µA/°C (-20 to +60°C)
Maximum current consumption (with 20mA signal)	52mA @ 24V dc
Maximum power dissipation within unit	<0.7W @ 24V dc
Digital Signal Bandwidth	Approx. 3dB @ 1KHz to 2.2KHz
Isolation	50V ac or dc between power, field and system circuits. (tested to 1500V)

Powering Business Worldwide

Eaton Electric Limited,
Great Marlings, Butterfield, Luton
Beds, LU2 8DL, UK.
Tel: + 44 (0)1582 723633 Fax: + 44 (0)1582 422283
E-mail: mtlenquiry@eaton.com
www.mtl-inst.com

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EUROPE (EMEA):
+44 (0)1582 723633
mtlenquiry@eaton.com

THE AMERICAS:
+1 800 835 7075
mtl-us-info@eaton.com

ASIA-PACIFIC:
+65 6 645 9888
sales.mtlsing@eaton.com

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