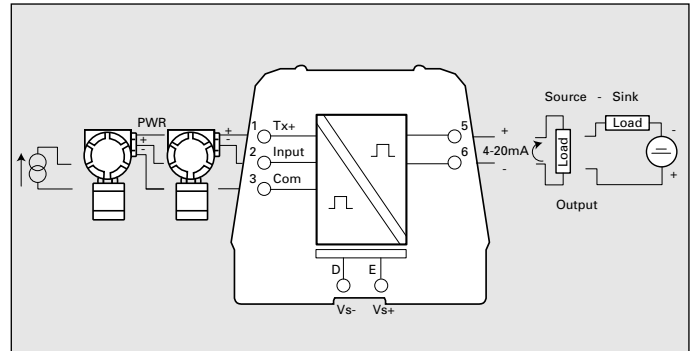


MTL1142 Transmitter Power Supply

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	250V ac or dc functional isolation between power, field and system circuits. (Tested to 1100Vac)