## MTL1143 Transmitter Power Supply with Repeat Output

## 1 Channel, Smart for 2/4-wire transmitters

The **MTL1143** is a Single Channel Analogue Input isolator with dual outputs. HART communication is provided for Smart two wire transmitters via Output 1. 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.  $\begin{array}{c} & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & & \\ & & & \\ & & & \\ & & & & \\ & & & & \\ & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ &$ 

August 2017

EPS 1143 rev 3

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

SPECIFICATION see also common specification	
Number of channels	One, with 2 fully floating outputs
Location of Transmitter	Safe area
Input and output signal range	4 to 20mA
Under/Over-range	<3.0mA to >23mA
System output load resistance (source mode)	@ 20mA: O/P1 0 to 330Ω, O/P2 0 to 380Ω @ 24mA: O/P1 0 to 270Ω, O/P2 0 to 300Ω
Power supply voltage	18V to 32V DC
Transmitter supply 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)	53mA @ 24V dc
Maximum power dissipation within unit	<0.85W @ 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)



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

© 2017 Eaton All Rights Reserved Publication No. EPS 1143 rev 3 030817 August 2017 EUROPE (EMEA): +44 (0)1582 723633 mtlenguiry@eaton.com

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

ASIA-PACIFIC: +65 6 645 9888 sales.mtlsing@eaton.com The given data is only intended as a product description and should not be regarded as a legal warranty of properties or guarantee. In the interest of further technical developments, we reserve the right to make design changes.



1