

# MTL4644/S REPEATER POWER SUPPLY

2-channel, 4/20mA, HART®, 2- or 3- wire transmitters

The MTL4644 provides fully-floating dc supplies for energising two conventional 2-wire or 3-wire 4/20mA or HART transmitters, and repeats the current in other circuits to drive two loads. For smart transmitters, the unit allows bi-directional transmission of digital communication signals superimposed on the 4/20mA loop current. Alternatively, the MTL4644S acts as a current sink rather than driving a current into the load.

## SPECIFICATION

See also common specification

### Number of channels

Two

### Output

Signal range:	4 to 20mA
Under/over-range:	0 to 24mA
Load resistance (MTL4644)	
@ 24mA:	0 to 375Ω
@ 20mA:	0 to 465Ω
Load (MTL4644S)	
Current sink:	600Ω max.
Maximum voltage source:	24V dc
Circuit output resistance:	> 1MΩ

### Circuit ripple

< 50μA peak-to-peak

### Input

Signal range:	0 to 24mA (including over-range)
Transmitter voltage:	20V at 20mA

### Transfer accuracy at 20°C

Better than 20μA 4-20mA (Terminals 1 & 2 / 4 & 5)
Better than 30μA 4-20mA (Terminals 1 & 3 / 4 & 6)

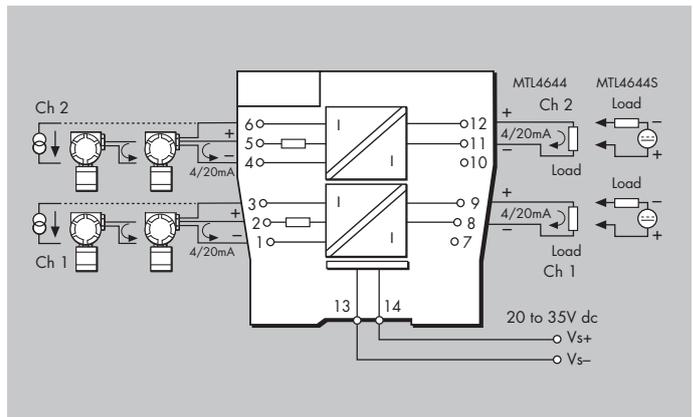
### Temperature drift

< 0.8μA/°C

### Response time

Settles to within 10% of final value within 50μs

## MTL4644 / MTL4644S



### Communications supported

HART (terminals 1 & 2 and 4 & 5 only)

### LED indicator

Green: power indication

### Maximum current consumption (with 20mA signals)

100mA at 24V dc

### Power dissipation within unit (with 20mA signals)

MTL4644	1.5W @ 24V dc
MTL4644S	2.0W @ 24V dc

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.



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