

# MTL4641/S

## REPEATER POWER SUPPLY

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

The MTL4641 provides a fully-floating dc supply for energising a conventional 2- or 3-wire 4/20mA transmitter and repeating the current in another floating circuit to drive a load. For HART 2-wire transmitters, the unit allows bi-directional communications signals superimposed on the 4/20mA loop current. Alternatively, the MTL4641S acts as a current sink rather than driving a current into the load.

### SPECIFICATION

See also common specification

#### Number of channels

One

#### Output

Signal range:	4 to 20mA
Under/over-range:	0 to 24mA
Load resistance (MTL4641)	
@ 24mA:	0 to 360Ω
@ 20mA:	0 to 450Ω
Load (MTL4641S)	
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:	17.6V at 20mA (MTL4641)
	16.5V at 20mA (MTL4641S)

#### Transfer accuracy at 20°C

Better than 15μA

#### Temperature drift

< 0.8μA/°C

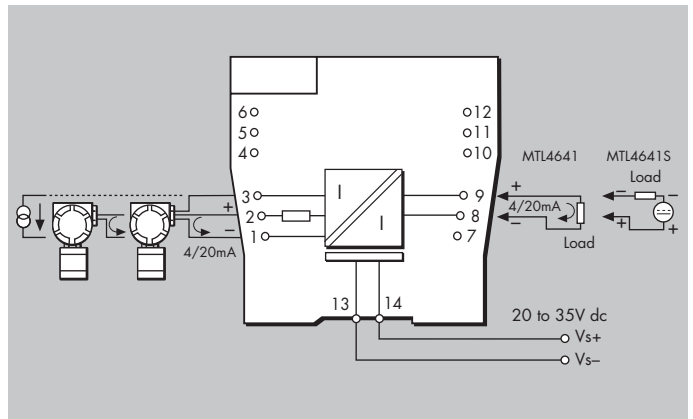
#### Response time

Settles to within 10% of final value within 50μs

#### Communications supported

HART (terminals 1 & 2 only)

### MTL4641 / MTL4641S



#### LED indicator

Green: power indication

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

51mA at 24V

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

MTL4641	0.7W @ 24V dc
MTL4641S	1.0W @ 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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