

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

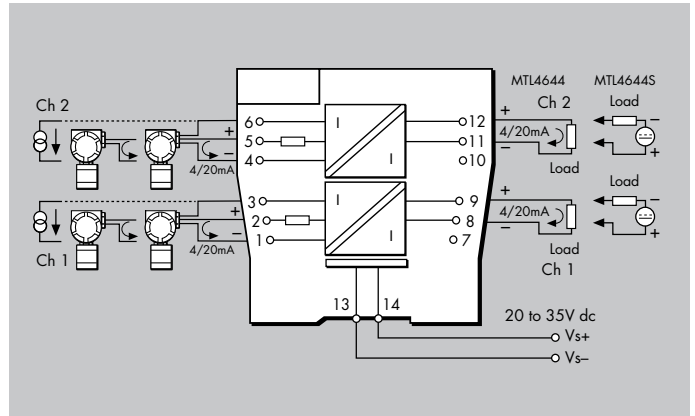
< 0.8μA/°C

Response time

Settles to within 10% of final value within 50μs

Communications supported

MTL4644 / MTL4644S



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.



EUROPE (EMEA): +44 (0)1582 723633
 enquiry@mtl-inst.com

THE AMERICAS: +1 800 835 7075
 csinfo@mtl-inst.com

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

EPS4644/S Rev3 060314