

SPECIFICATION

Number of channels

One

Location of I/P converter

Zone 0, IIC, T4-6 hazardous area if suitably certified
Div. 1, Group A, hazardous location

Working range

4 to 20mA

Digital signal bandwidth

500Hz to 10kHz

Maximum load resistance

800 Ω (16V at 20mA)

Minimum load resistance

90 Ω (short-circuit detection at < 50 Ω)

Output resistance

> 1M Ω

Under/over range capability

Under range = 1mA

Over range = 24mA (load ≤ 520 Ω)

Input and output circuit ripple

< 40 μA peak-to-peak

Transfer accuracy at 20° C

Better than 20 μA

Temperature drift

< 1.0 μA/° C

Input characteristics

Normal < 6.0V

Open-circuit < 0.9mA

Short-circuit < 0.9mA

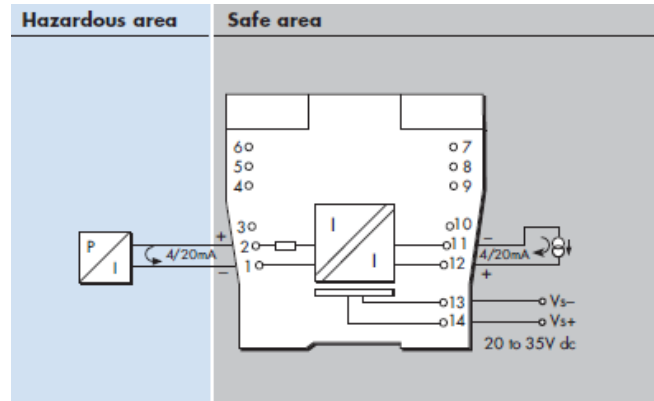
Response time

Settles within 200 μA of final value within 100ms

Communications supported

HART

Wiring



LED indicator

Green: power indication

Maximum current consumption (with 20mA signals into 250 Ω load)

35mA at 24V dc

Power dissipation within unit (with 20mA signals into 250 Ω load)

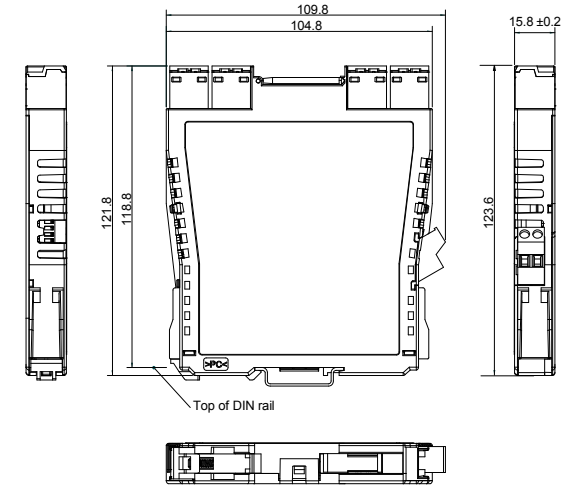
0.8W at 24V

Safety description

$V_o=28V$ $I_o=93mA$ $P_o=651mW$ $U_m = 253V$ rms or dc

SIL capable

These models have been assessed for use in IEC 61508 functional safety applications. See data on MTL web site.



Isolation

250V rms, tested at 1500V rms minimum, between safe- and hazardous-area terminals.

50V between safe-area circuits and power supply

Supply voltage

20 - 35V dc

Location of units

Safe area

Terminals

Accepts conductors of up to 2.5mm² stranded or single-core
Mounting

T-section 35mm DIN rail (7.5 or 15mm) to EN 50022

Ambient temperature limits

-20 to +60° C (-6 to +140° F) operating

-40 to +80° C (-40 to +176° F) storage

Humidity

5 to 95% relative humidity

Weight


Approximate (except where indicated)

MTL5500 150g

Connectors

Each unit is supplied with signal connectors, as applicable.

When using crimp ferrules for the hazardous or non-hazardous (safe) signal connectors the metal tube length should be 12mm and the wire trim length 14mm.

REV.	PROJECT NAME:	Cooper Industries Japan K.K.		Model name		MTL5546	
REV.	USER NAME :	TEL: +81-(0)3-5420-1281		SIZE	FSCM NO	Drawing No.	rev
REV.	JOB NAME :	FAX: +81-(0)3-5420-2405		DATE: 2011/May/25			SS-MTL5546
	Ref no.:	CHKD T.IWANE	DRAWN K.KUSAKABE	SCALE	N/A	SHEET	1 / 1