

S10 Intrinsically Safe Multiplexer

Cost effective means of transferring digital signals

Compact

Fast response time

Simple to understand and simple to use

Power and signal transmitted on single cable pair

Encapsulated electronics

The S10 was introduced as the world's first intrinsically safe Multiplexer and continues to provide a cost-effective solution to a common industrial need.

The Multiplexer is sold as a matching pair consisting of a certified 10 channel transmitter and a safe area 10 channel receiver which work together to transfer digital signals from a hazardous area to the safe area over a single pair of cables.

The transmitter accepts digital signals from switch or relay contacts in the hazardous area and transmits their status to the safe area receiver. Relay outputs on the receiver unit mirror the change in state of the digital inputs.

A single cable pair is used both to transmit the signals from the hazardous area and also provide power to the transmitter



Technical Specification

Certification

The hazardous area transmitter is ATEX certified to EN 50014:1997 and EN50020:2002

Group II, Category 1G, EEx ia IIC T5 (Ta -20°C to 55°C)

Location

Zones 1 or 2. Gas Groups IIC, IIB or IIA, Temp Class up to T5

Certificate No.

Baseefa03ATEX0483

Safety Parameters

See Certificate

Supply

Transmitter: Through IS Interface

Receiver: Nominal 24VDC (22-30VDC). Current 400mA maximum

Operating Range

Up to 2km

Outputs

One changeover volt-free relay contact per channel energised when the field contact is open. Contacts rated at 1A @ 30VDC or 110VAC

Response time 6.4ms maximum

LED outputs 12V via 1kohm resistor, 10mA per LED

Recommended Interface

Zener Barriers: MTL7715+, MTL7715P+

IS Isolators: MTL

Construction

Transmitter: Fully encapsulated circuit board in blue resin

Receiver: Painted mild steel casing

Mounting

Four M3 clear holes are provided to mount to unit directly to any suitable flat surface

Connection

Rising clamp terminals suitable for 1.5mm² cable

EMC Compliance

Immunity to EN61000-6-2

Emissions to EN61000-6-4

Environment

Operating Temperature: -10°C to 50°C

Storage Temperature: -30°C to 70°C

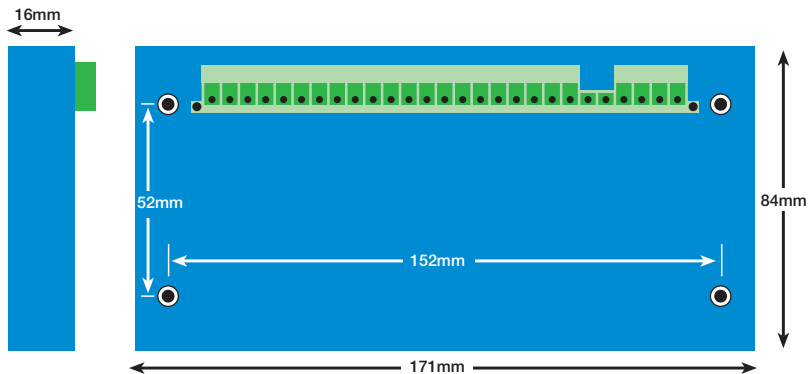
Humidity: 0-95% RH, non-condensing

Weight

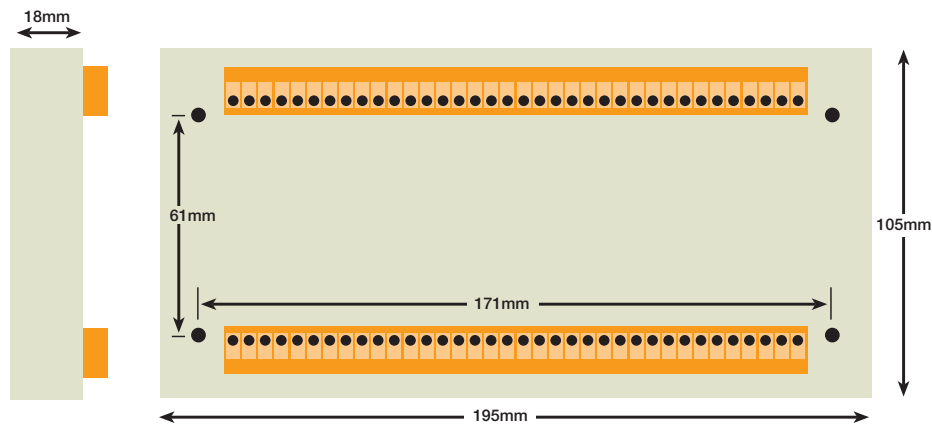
Transmitter: 425g

Receiver: 660g

Transmitter



Receiver



Due to our policy of continuous product development, we reserve the right to amend specifications without notice.



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