



TECHNOVATION Analytical Instruments Pvt.Ltd

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4 - 20 mA LOOP POWERED TWO WIRE INDUSTRY STANDARD TRANSMITTERS

THE INSTRUMENT

Often it is more cost effective to replace a sensing head with one which is precalibrated at a testing station, thus reducing disruption of the measuring system. Technovation offers such an industry standard 4 - 20 mA transmitter consisting of an electrochemical sensor, its associated circuitry and in a weather-proof housing.

FEATURES

The two-wire transmitter allows the signal and power to be supplied on a single wire-pair by modulating the power supply current with the input signal source. The transmitter is immune to voltage drops from long runs and noise from motors, relays, actuators, switches, transformers and industrial equipment.

APPLICATIONS

Every transmitter is supplied precalibrated for a customer specific range. The table below gives an indication of the gases/ranges offered. These transmitters can be connected to a DCs system which supplies the DC Power for the loop. They could also be connected to stand alone controllers and PLCs and other data acquisition systems.

STANDARD SPECIFICATIONS

Power Supply	: 12 to 28 VDC Single ended
Sensor Expected life	: 2 years in air
Sensor type	: Electrochemical
Duty	: Continuous operation
Operating temp	: 20 °C to 45 °C
Operating Humidity	: 10 - 90 % RH
Operating Pressure	: Ambient
Output impedance	: 2 M Ohms
Calibration	: Via built in Span and Zero potentiometers.
Housing	: Cast aluminium weather proof housing
Sampling	: Diffusion mode OR in flow through mode

MODULAR CONVENIENT AND INDUSTRY STANDARD COMPATIBLE



TECHNOVATION® 4 - 20 mA TWO WIRE TRANSMITTER

POWER SUPPLY RESTRICTIONS

As the minimum operating voltage for the transmitter is 12 V DC it will impose constraints on the total loop resistance in the external circuit, and this must be taken into account when choosing the supply voltage. This includes the cable resistance, and the measuring resistor at the remote receiver and any meters used for calibration.

TABLE OF GASES & RANGES	
OXYGEN	0 - 25 %
CARBONMONOXIDE	0 - 1000 PPM
HYDROGEN SULPHIDE	0 - 100 PPM
SULPHUR DIOXIDE	0 - 20 PPM
CHLORINE	0 - 50 PPM
NITROGEN DIOXIDE	0 - 100 PPM
HYDROGEN	0 - 1000 PPM or 2 %
ARSINE	0 - 1 PPM
HYDROGEN CYANIDE	0 - 30 PPM
OZONE	0- 1 PPM
PHOSPHINE	0 - 1 PPM
AMMONIA	0 - 100 PPM
PHOSGENE	0 - 1 PPM
HYDRAZINE	0 - 1 PPM
OTHER GASES AND RANGES ON REQUEST	