



Wireless Transmission of 4-20mA Signals



Features:

- 4-20mA Input / 4-20mA output via Radio Link.
- Eliminates cables.
- Ideal for remote locations.
- Simple to retrofit to any 4-20mA Sensor.
- Digital Transmission for ultimate reliability.
- No licence required in U.K. (Overseas approval available).
- High accuracy.
- No maintenance.
- Very easy to use.
- Microprocessor controlled.

Single Channel Transmitter Unit TR420 Single Channel Receiver Unit SR420

Description

The SIGTEL 420 Series is a new easy to use point to point radio telemetry system for wireless communication of 4-20mA instrumentation signals.

Sigtel TR420 Transmitters and SR420 Receivers offer a simple, low cost solution where **any** 4-20mA signal from remote sensors can be transmitted without using expensive cabling. An additional benefit is that data is digitally encoded, giving secure, error-free transmissions.

Typical applications include D.P., temperature, pressure, flow, level, position, vibration - and many more examples. Data received can be linked to any 4-20mA device.

Radio Telemetry and Telecommand Systems.

Operation

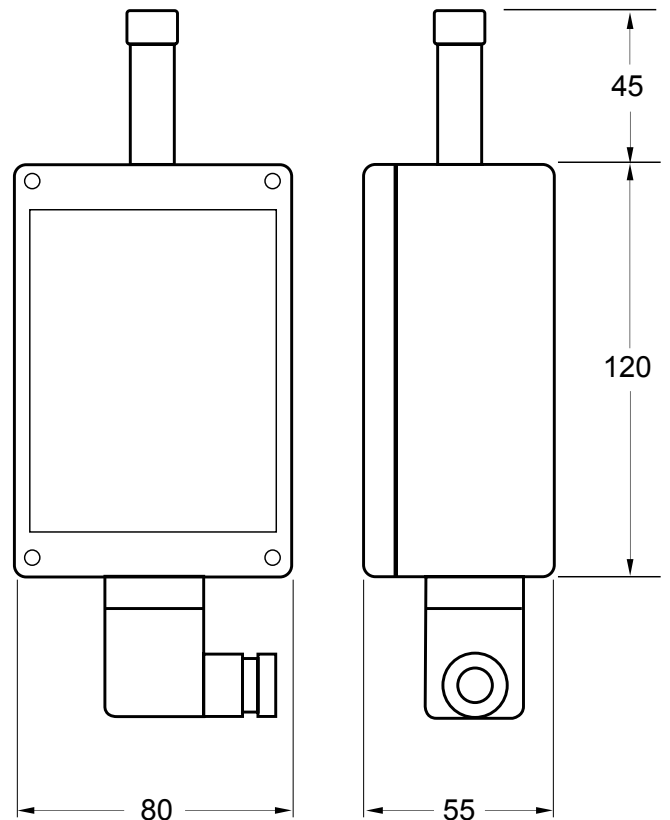
The TR420 transmitter unit converts the 4-20mA input signal to a digital code. This code is then processed to produce a data frame ready for transmission. The SIGTEL protocol for the data frame includes an address field and a number of advanced data error detection techniques which enables reliable data transfer.

In order to minimise signal collision between adjacent systems, a number of repeat transmissions are made, each separated by a random delay. The SR420 Receiver unit decodes the received data to produce a 4-20mA output signal. Each data frame is checked for the correct address match and data errors. If the data frame is not correctly validated, the data is discarded and the receiver waits for a new transmission.

Technical Specifications

	TR420 TRANSMITTER	SR420 RECEIVER
INPUT SIGNAL:	4-20mA	
OUTPUT SIGNAL:		4-20mA
RESOLUTION:	Better than 0.05% (12 Bit)	Better than 0.05% (12 Bit)
FREQUENCIES:	418/433MHz	418/433MHz
OPERATING RANGE:	100-300mtrs	100-300mtrs
APPROVAL:	MPT 1340 ETS-300-200	MPT 1340 ETS-300-200
SUPPLY VOLTAGE:	12V to 30VDC	12V to 30VDC
CURRENT DRAIN:	4mA	26mA
TEMPERATURE:	-10 deg C to +55 deg C	-10 deg C to +55 deg C
ENCLOSURE:	High impact Polycarbonate	High impact Polycarbonate
RATING:	IP65	IP65
DIMENSIONS:	120 x 80 x 55mm	120 x 80 x 55mm
CONNECTOR:	DIN 43650	DIN 43650
ANTENNA:	42mm Fixed Helical	42mm Fixed Helical

(Dimensions Details)



A MEMBER OF



LOW POWER
RADIO ASSOCIATION

SIGTEL operate a policy of continuous development in design and manufacture. We reserve the right to change specifications without prior notice.