

Frequency to mA Converter (FA12 Series)

Description

The FA12 is a microprocessor controlled device that provides conversion of a sensor frequency signal into a current signal output.

Installation

The Frequency to Current Converter is connected between the output of an Envirodata sensor, and logging equipment requiring the current signal.

Mechanism

The FA12 converter measures the frequency of the incoming signal, and converts this to an output current proportional to incoming frequency.

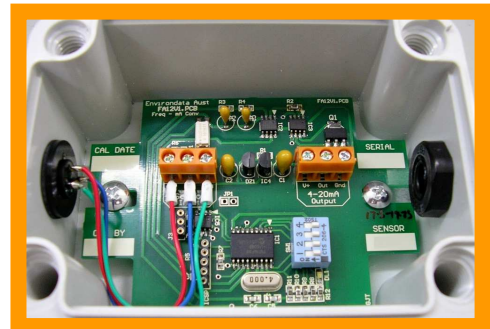
Limitations

The FA12 needs to operate using a three wire system, such that the outgoing signal wire is separate from the power supply wires.

Calibration Verification

The FA12 is supplied factory calibrated, and may be connected to most Envirodata sensors (selectable by an internal DIP switch) without requiring re-calibration. The sensor type is selected prior to shipping, and may be changed if required. If the setting is incorrect for the connected sensor type, the FA12 may yield incorrect readings.

For example, for connection of a SR10 Solar Radiation sensor, the input range is selected to provide an output of 4 mA (0 W/m²) to 20 mA (2000 W/m²) for the input range of 0Hz-10Hz. Optionally, if you selected the 0Hz-5Hz range, the output signal would be 4mA(0 W/ m²) to 20mA (1000 W/ m²).

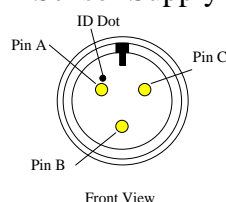


Sensor Connection

The sensor input connector is a Conxall three pin weatherproof male panel mount connector that mates to all Envirodata pulse output sensors.

The wiring is as follows:

- +6.3V DC Sensor Supply (**Red**)
- Signal Input From Sensor (**Blue**)
- Sensor Supply Ground (**Green**)



4-20 mA Connection

Via a 3pin terminal block.

- Supply Positive (+12 to +28 V DC)
- Output Signal (4-20mA)
- Supply Ground

Gland Type: PG7

Cable Size: 4 - 7mm Dia cable

Enclosure: Piccolo type IP66/67

Envirodata Environmental Monitoring & Management

P.O. Box 395, WARWICK, Queensland, 4370, Australia

Phone: (07) 4661 4699

Int. Phone: + 61 7 4661 4699

e-mail: sales@envirodata.com.au

Fax: (07) 4661 2485

Int. Fax: +61 7 4661 2485

http://www.envirodata.com.au