



METEOROLOGICAL EQUIPMENT

ED-210 F/I-U CONVERTER

FEATURES

- 0.2 - 100 Hz measurement.
- Current and voltage output.
- Only one period is necessary to produce a valid output.
- Resolution better than 0.1 Hz.
- LED-indication for Signal and Supply Voltage.
- Low Power Consumption.
- 24 VDC Supply Voltage.
- 11-Pole PLUG-IN Module.

APPLICATIONS

- Converts signals from Opto-type Wind Speed Sensors to analog signal levels.

TECHNICAL CHARACTERISTICS

The ED-210 F/I-U Converter Modul is designed to interface an ED-Wind Speed Sensor to an Analog Instrument. It can also be used with Anemometers equipped with Reed Switch or Hall-Effect Switch.

The ED-210 measures the time of a full period of an input signal. This time is converted by a Microcontroller into an analog Output level.

The Microcontroller offers a resolution by 0.25 μ Sec. in time. This gives the ED-210 a precise measurement of low frequencies.



The Output is generated by an accurate 12 bit D/A-Converter.

The Output Circuit is furthermore calibrated for deviation in Offset and Gain by the Microcontroller software.

This gives the ED-210 Module an accuracy better than 0.1 % at any Output value.

TECHNICAL SPECIFICATIONS FOR ED-210 F/I-U CONVERTER.

Measuring Range :

0.2 - 100.0 Hz.

Input Signal :

4-20 mA Current drain (EDSC Default)
Reed Switch / Hall-Effect Switch

Linearity :

± 0.5 LSB.

Output Signal :

0.0-10.0 V ± 0.1% @ 50KΩ<Rb<1MΩ.
0-20 mA ± 0.1% @ 100Ω<Rb<600Ω.

Resolution :

Better than 1/4000 of Fullscale.

Power/Signal Indication :

3mm LED Red.

Signal Indication for Input frequencies :
≥ 0.2 Hz : LED shows half input frequency.
< 0.2 Hz : LED is constant ON.

Supply Voltage :

24 VDC ± 15%.

Current Drain :

Max. 40 mA. (No load)

Operating Temperature :

-10 to +60°C

Electrical Connections

	11-Pole Plug
Terminal 1:	Output GND.
Terminal 2:	Output U+.
Terminal 3:	Output I+.
Terminal 4:	NC.
Terminal 5:	Input GND.
Terminal 6:	Input Signal.
Terminal 7:	Feedout +12VDC.
Terminal 8:	NC.
Terminal 9:	+ 24 VDC.
Terminal 10:	NC.
Terminal 11:	Supply GND.

Mechanical Specifications :

Height	75mm.
Width	37mm.
Depth	73mm.
Weight	75g.

Accessories included :

11-Pole Socket for DIN-rail mounting

Options (By order) :

Transmitter type:
X: 4-20 mA Current drain (EDSC Default)
Y: Reed Switch / Hall-Effect Switch

Measuring Range :

1: 0.2-100 Hz.
2: 0.2-200 Hz.
3: 0.2-500 Hz.
4: 0.2-1000 Hz.
5: 0.2-2000 Hz.
6: User defined: _____ Hz

Signal Output :

A: 0.0-2.50 V @ 50KΩ<Rb<1MΩ.
B: 0.0-5.0 V @ 50KΩ<Rb<1MΩ.
C: 0.0-7.5 V @ 50KΩ<Rb<1MΩ.
D: No U-out.
E: No I-out
F: 4-20 mA @ 100Ω<Rb<600Ω.

Supply for Hall-sensor :

Terminal 7 (Feedout).

Processing (Average) :

Contact Manufacture for options.

EU Declaration of Conformity :

EN61000-6-3 Emission.
EN61000-6-2 Immunity.

Warranty :

One Year against faulty materials
or workmanship.

Maintenance

None.

Serial no.: _____

Options: _____

Date: _____

Processing Average: _____ Pulses.

Sign: _____