

DataNet Wireless intelligent logging network

fourier

Specifications

INPUTS

- 4 channel inputs
- Selectable type for each input: 4 to 20 mA, 0 to 50 mV, 0 to 1 V, PT-100, Thermocouple, Pulse counter (Input 4 only), Channel 4 - frequency (Input 4 only) and user defined sensors

INPUT TYPES

4 to 20 mA

- Range: 4 to 20 mA
- Resolution: 0.47µA
- Accuracy: ±0.5%
- Loop impedance: 21Ω
- Maximum load: 30mA, 5.2V

0 to 50 mV

- Range: 0 to 50mV
- Resolution: 3µV
- Accuracy: ±0.5%
- Input impedance: 25MΩ
- Maximum voltage: 5.2V

0 to 1 V

- Range: 0 to 1 V
- Resolution: 200µV
- Accuracy: ±0.5%
- Input impedance: 25MΩ
- Maximum voltage: 5.2V

Temperature PT100 (2 wires)

- Range: -200 to 400 °C
- Resolution: 0.1°C (7mΩ)
- Accuracy: -200 to 60 °C ±0.5%
- 60 to 400 °C ±0.5%
- 60 to 60 °C ±0.3 °C

Temperature thermocouple J

- Range: -200 to 1,000 °C
- Resolution: 0.1°C (1µV)
- Accuracy: -200 to 60 °C ±0.5%
- 60 to 1,000 °C ±0.5%
- 60 to 60 °C ±0.3 °C
- Cold junction compensation: ±0.3°C

Temperature thermocouple K

- Range: -250 to 1,000 °C
- Resolution: 0.1°C (1µV)
- Accuracy: -250 to 60 °C ±0.5%
- 60 to 1,000 °C ±0.5%
- 60 to 60 °C ±0.5 °C
- Cold junction compensation: ±0.3°C

Temperature thermocouple T

- Range: -200 to 400 °C
- Resolution: 0.1°C (1µV)
- Accuracy: -200 to 60 °C ±0.5%
- 60 to 400 °C ±0.5%
- 60 to 60 °C ±0.3°C
- Cold junction compensation: ±0.3°C

Pulse counter (input 4 only)

- Zero crossing detector
- Range: 1 to 64,000 counts
- Resolution: 1 count
- Frequency range: 0 to 50 KHz
- Input signal: 0 to 5 V
- Input impedance: 470Ω

Frequency (input 4 only)

- Zero crossing detector
- Range: 20 to 30 KHz
- Input signal: 0 to 5 V
- Input impedance: 470Ω

Internal Temperature

- Type: NTC resistor
- Range: -20 to 50 °C
- Resolution: 0.1°C (1µV)
- Accuracy: ±0.3°C

Internal Humidity

- Range: 5 to 95 %
- Resolution: 0.5%
- Accuracy: 3%

External Sensors

- PT100 Sensor: 3 cable length options
2.5m/4m/6m
- Teflon cable range: -65 to 200 °C
- Probe: Diameter 6mm, length 81mm

OUTPUT

External power excitation (Transducers usage)

- 12VDC@2A

Alarm output (output 1)

- Open collector
- Close position resistance: 50Ω
- Max. Load: 50mA, 5V DC
- Overload protection
- 50mA reset fuse

PC Communication

- USB 2.0 compliance

Type of USB cable

- Mini USB type B

RF Network Communication

- Frequency: 2.4GHz
- Network units: 65.000
- Data rate: 250Kbps
- Full mesh network architecture supported
- 128bit network security inscription
- Worldwide free license
- RF Transmission range boost mode 100m (line of sight)
- RF Transmission range power amplifier 800m (line of sight)

Sampling Features

- Memory Capacity: 60,000 samples
- Sampling rate: Variable, 1 sample per sec to 1 sample per 2 hours
- Sampling resolution: 16 bits
- Channel separation 80dB

Man Machine Interface

- Full keyboard operation

Display

- 2 lime LCD
- 16 characters display

Power Supply

- Internal rechargeable 4.8V NiMH battery
- Built in battery charger
- External 12V DC input

Operating Temperature Range

- -20 to 50 °C

Casing

- Plastic ABS box
- Dimensions: 10 x 9.5 x 3 mm
- Weight: 200gr

Standards Compliance

- CE, FCC

- Internal - battery specs: 4.8V 800mAh NiMH battery (2 batteries in series)
- External - voltage specs: DC 12V@300mA 3.6VA

DATANET SOFTWARE

Main Features

- Windows based software
- Data displayed in numeric or graphical display forms Graphical display of all inputs
- On-line retrieval and display of the collected data in real-time
- Definition of new sensors
- Ability to read the defined sensor's units on the logger's display
- Full calibration of the loggers via the software
- Documentation and filing
- Alarm levels on graphs
- Export to spreadsheets
- Analytical functions, for professional analysis of the collected data
- Manual backup of calibration settings
- Over-the-air firmware update

Ordering information

DNL 910	four channel mA, V, TC/K,J,T, PT100
DNL 920	internal RH and temp + four channel mA, V, TC/K, J,T, PT100
DNR 900	Receiver/Repeater
DN-PCSUITE	PC suite including communication USB cable, manual
12753	PT100 sensor 2.5m
12752	PT100 sensor 4m
12751	PT100 sensor 6m

For more information visit www.fouriersystems.com or Contact info@fouriersystems.com