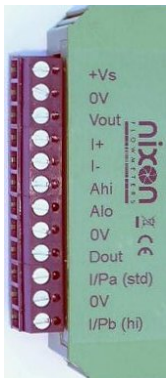


The N420 has been designed to convert signals from pulse producing flowmeters to provide analogue current and voltages and a digital pulse divider, this can provide an interface to existing instruments and PLCs. The unit can be supplied pre programmed or software may be supplied to enable the user to configure the unit as required. The unit can be programmed via a USB 2.0 interface.

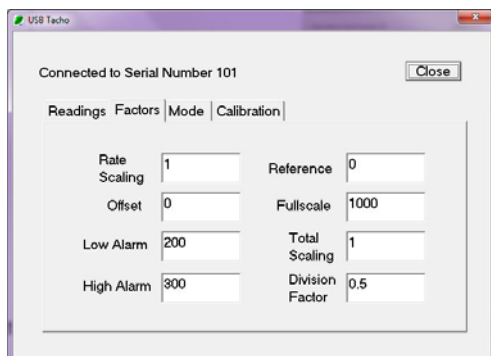
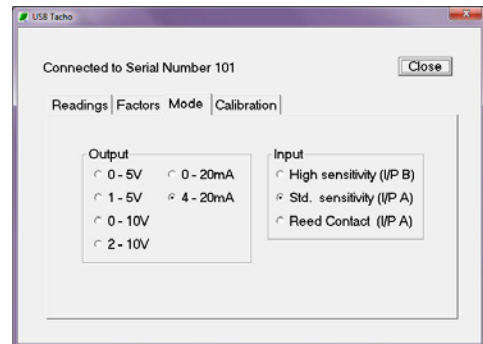


The following features are provided as standard:

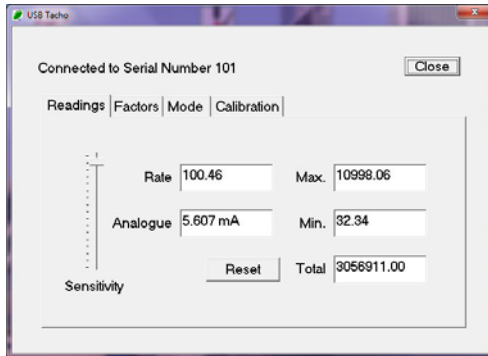
- Input options – user selects either high or standard sensitivity or reed relay
- Input sensitivity –user adjustment is available via an on-screen slider control
- Output options – user selects either the analogue voltage or analogue current option. In either case an additional digital output is provided which is a divided version of the input frequency.
- Fast update – 250 milliseconds
- Installation – the module is housed in a compact universal TS35 and TS32 DIN rail mounting plastic box for rapid and simple clip-in installation
- Power supply – 12V to 30V d.c. power can be connected via the terminal block or via a standard 2.5mm power connector
- Connections – via clearly labelled terminals
- Setting up – modules can be supplied factory pre-set to your operational parameters.
- Software – the application software is freely downloadable from our website



The required input and output functions are selected by just two clicks of a button.



All required operational parameters, such as scaling factor, high and low alarms, etc., are entered via on-screen dialogue boxes, and once entered are stored in non-volatile memory.



In use the device will operate as a stand-alone module. However, by connecting to the USB port, users can access an on-screen display that shows current operational status and the input sensitivity setting.

Additionally, maximum (peak-hold) and minimum rates and a cumulative scaled input pulse total are displayed. These three values can be reset by clicking on the **Reset** button or by applying an external signal on the terminal block.

## Specification

### Power supply:

- 12V d.c. (clean) @ 180mA nominal (11.5V minimum, 30V maximum, reverse polarity protected to 20V). If power is not available from the installation, we can provide a suitable low-cost stand-alone mains powered unit – contact our Sales Office for details

### Signal inputs:

- High sensitivity – user adjustable from 10mV to 1V (protected to 100V)
- Standard sensitivity – user adjustable from 150mV to 13.5V (protected to 100V)
- Measurable frequency range on High and Standard sensitivity inputs – 0.5Hz - 30KHz, impedance 15K minimum
- Reed Relay – bounce protected. Input frequency 100Hz maximum

### Signal outputs (>15 bit resolution):

- Analogue voltage output – user selectable as 0 - 5V, or 1 - 5V, or 0 - 10V, or 2 - 10V
- Analogue current output – user selectable as 0 - 20mA, or 4 - 20mA
- Digital output – 5V TTL compatible square wave, frequency scaled output  
Frequency out = K x frequency in. K=0.0000001 to 0.5

### Control input:

- Reset – this is the standard function, can be factory customised for other functions

### Alarm outputs:

- User settable Low and High alarms – open collector (200mA 60V d.c. maximum)

### Calibration:

- Factory set to fully traceable National Standards

### Connections:

- Power supply – screw terminals on top face or via dedicated connector in side face
- Inputs and outputs - clearly labelled external screw terminals on top face
- USB 2.0 – USB port in side face



### Dimensions:

22.5mm wide x 82mm high x 90mm deep (98mm including terminals)

### Weight:

100gm nominal

### Operating temperature:

0°C to +70°C

### Protection:

This module is not suitable for unprotected use in adverse environmental conditions.