

# Logger

Technical Guide W4.75

Accurate, reliable and affordable loggers that deliver timely and valuable data you can rely on for decision making.



03.25 | W4.75 I20 LOGGER

## Applications

Provides network analytics through flow monitoring and pressure management

## Product Attributes

The lowest lifetime cost  
Valuable data you can rely on for decision making  
Timely data return to enable effective decision making

## Quality

ISO 9001:2015 Quality Management Systems

*We are the supply partner of choice for New Zealand's civil construction industry, specialising in water and infrastructure based solutions.*

# Accurate, reliable and affordable loggers that deliver timely and valuable data you can rely on for decision making.

## Features

### LOWEST LIFETIME COST

i20 loggers offer the lowest lifetime cost in the market:

- High precision Swiss made transducers mean no requirement for recalibration
- More than 5 years battery life from internal battery with options to use external battery pack or DC power source
- SIM card and battery easily exchanged by user in the field
- Standard 3 year warranty, extended warranty available
- Designed and tested to IP68
- Capable of withstanding extreme environmental conditions between -20C and +60C and 85%humidity
- Robust enough to withstand 1.2m impact on concrete
- Future proofed through over-the-air firmware upgrades
- Options for SFTP or API for data transfer

### ACCURATE AND COMPLETE DATA, SECURELY COMMUNICATED

- Better than +/- 0.1% FS precision
- Better than +/- 0.2% FS drift, no need for recalibration in lifetime
- Non-volatile data storage up to a year so no loss of data from power interruptions
- High performance internal antenna, convertible to external in the field to aid poor mobile network reception
- Secure data communication on the 2G, 3G or NB-IoT network of your choice. Roaming SIMs also supported

### VALUABLE DATA YOU CAN RELY ON FOR DECISION MAKING

- Up to 3 pressure measurements and 2 flow channels
- Enables asset condition monitoring
- Enhanced statistics for transient detection and investigation
- Data resolution from 1 s to 24 hours
- Records mobile network signal strength

### TIMELY DATA RETURN TO ENABLE EFFECTIVE DECISION MAKING

- You configure the frequency of data transmission
- Set thresholds for each channel input and configure SMS alerts and latest data transmit on threshold breach

### Dimensions

- Size (mm): w115 x d115 x h115
- Weight (kg): 0.68

### Configuration

- Data sampling interval: > 1 min (15 min default)
- Data logging interval: > 5 min (24hr default)
- Dial up interval: 24hr default
- Temperature/voltage: Logged (default = hourly)
- GSM signal strength: Logged on GSM connection

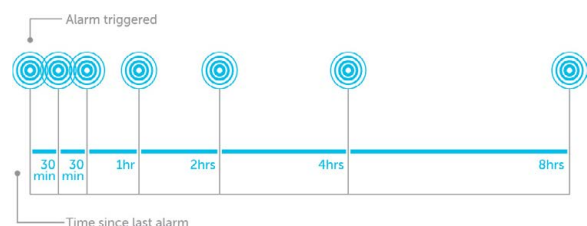
## ALARMS

Alarm thresholds can be individually set for each flow and pressure channel. Alarms trigger the following actions:

- Send an SMS and/or an email containing alarm details
- Dial up with increased regularity

A nighttime period can be defined so alternative thresholds can be set for a flow channel to aid accurate breach and burst detection.

When an alarm is raised the decaying process is triggered, with data delivered at the intervals shown above. When the alarm is cleared the decay process is cancelled. Data is delivered at this point and then 2 hours later for post-event analysis.



## LOGGING MODES

- Loggers are available in the following configurations:
  - 0, 1 or 3 pressures and support single and bi-directional flow
- Connection kits are available to match these configurations
- USB interface present on all loggers
- 10Bar transducers fitted as standard, 30Bar transducers are available at no extra cost
- Internal or field upgradable external antenna
- Internal battery, external battery or external power

### STANDARD LOGGING

Mean of samples over logging interval

### ENHANCED STATISTICS

Instability, pressure transients and surges can be identified from maximum, minimum and standard deviation pressure values captured during the logging interval.

## INTERFACES

### DIGITAL FLOW INPUT

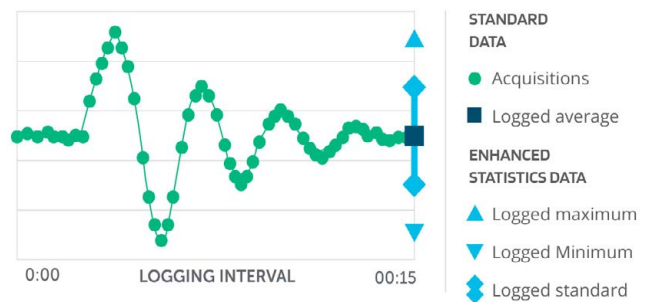
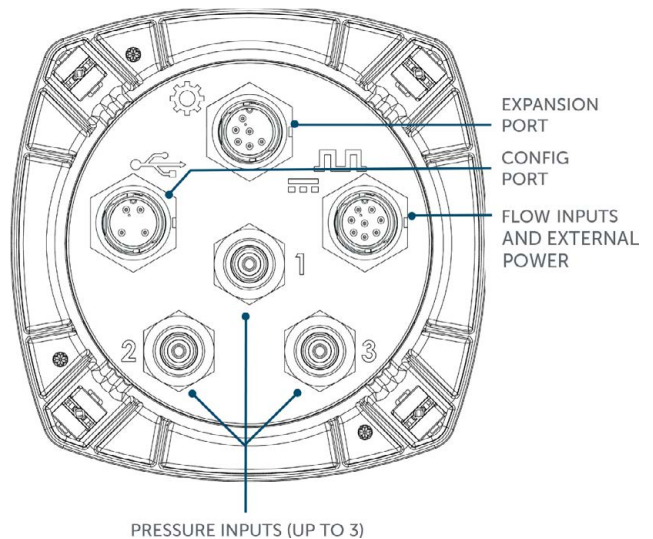
- Industry standard 2-wire interface plus 3 and 5 wire bi-directional meters
- 100Hz maximum pulse frequency
- 5ms minimum pulse width

### PHYSICAL INTERFACES

- Configuration port: USB connection to PC, Windows tablet or Android phone and tablet
- Expansion port: connection for external power sources, 6V-30V

### OVER THE AIR (OTA) INTERFACE

- Network: quad-band GSM and Penta-band UMTS
- SIM: field replaceable, automatic configuration, supports roaming SIMs



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