TRITON I D data Logger

INTRODUCTION

TRITON range of data loggers use a new data logging architecture that allows the user to monitor pressure/flow inputs in terms of average values based on typical 15 minute logging rate plus minimum/ maximum values based on fast sample rates down to 1 second.

TRITON range of loggers store data in **non-volatile** memory organised into data files. Each data file is an independent data logger with its own start/stop time, sample rate and logging rate. More than one data file can record different types of data for the same input channel. Different types of data include Average, Instantaneous, Minimum, Maximum etc. The memory register size has been increased to overcome register overflows associated with high pulse rates on Flow inputs.

TRITON I D has a built in LCD display that can be configured to display pressure and flow reading plus the total volume and meter reading plus more.

Pressure measurement accuracy is optimised by venting the built in pressure sensors to atmosphere and using multi point calibration. Logged data can be re-calibrated any time by recalibrating the pressure transducer to the logger

Local communications is via a fast non-contact IrDA communications link (115,200 baud). The logger software can also be upgraded in the field via the IrDA communications link.

TRITON I D is completely waterproof, submersible and battery powered with a typical battery life of 10 years.

APPLICATIONS

TRITON ID data loggers can be used for many water applications, including:

1. Leakage flow-monitoring
2. Step Testing
3. Pressure/PRV monitoring
4. Hydraulic network analysis
5. Pressure surge Detection
6. Monitor weirs, reservoirs, Bore-hole depth
7. Rainfall monitoring
8. Pump ON/OFF times
9. Minimum Night Flow analysis.

Pressue/Analogue Inputs

TRITON ID can accept analogue inputs from transducers including:

Pressure transducers:	1 to 40 Bar
Depth transducers:	0.15, 0.35, 0.7, 1, 2 Bar
Current inputs:	0-10mA, 4 - 20mA
Voltage inputs:	0-1, 0 – 10V

Digital Inputs

Pulse rate up to 400 pulses per second

TRITON ID can operate with many flow meter sensors including ones from.

GCR:	**Solid State: LP10, HP100**
Elster:	PSM, MSM, LRP, HRP, BPG20, Q4000
Actaris:	Cyble LF, Cyble HF
Sensus:	RD01, OPTO 06, OD 07
ABB:	MagMaster, AquaProbe, AquaMaster
Quadrina:	MPT, MEP, QEP

Logging and Communications

Memory:	2 M Bytes organised into 8 separate data files of 64000 reading each. Block or Cyclic – Start/Stop
Memory Type:	Flash non-volatile memory. Data is retained for 10 years if battery power fails.
Sampling Rate:	1 second to 24 hours
Logging Rate:	1 second to 24 hours
Logged data types:	Average, Instantaneous, Minimum, Maximum
Flow Logging Modes:	Count, Event, Pulse Interval Timing
Communications:	IrDA – Baud Rate of 115,200 Baud
LCD Display:	8-Digit display User configurable to display: Latest values & summary history

Physical

Case Dimensions:	145L x 90W x 55D
Construction:	Stainless steel enclosure powder coated (IP68 submersible)
Weight:	1.25 kg
Operating temperature:	-20 to + 70 degree Celsius (-5 to + 160 degree F) LCD Display: +5 to +70 degree Celsius
Logger range:	1 to 4 channels selectable from 2-Flow and 2- Pressue/Analogue

TRID - PPFF or TRID - PPF

TRID-PF

TRID-P

TRID-F