





PRECISE PRV PRESSURE CONTROL AND OPTIMISATION



■ i2O'S PRV CONTROL IS PART OF THE ONET SOLUTION. IT HAS 2 COMPONENTS: CONTROL LOGGER AND ADVANCED PILOT VALVE (APV). IT IS USED TO REMOTELY CONTROL PRESSURE, OR AUTOMATICALLY DELIVER TARGET PRESSURES AT A CRITICAL POINT. IT OPERATES ON ALL GLOBE TYPE DIAPHRAGM ACTUATED PRESSURE REDUCING VALVES (PRVS) GREATER THAN 50MM. THE BENEFITS ARE:

Consistent delivery of target pressure for customers

Reduction in leakage and bursts

Reduction in operating costs

Extended asset life for downstream networks

Reduced energy costs from upstream pumping

ROI varies depending on the network but is typically less than 24 months



CONTROL LOGGER



CONFIGURATION

DATA SAMPLING INTERVAL	≥ 1s (1 min default)
DATA LOGGING INTERVAL	≥ 1 min (15 min default)
DIAL UP INTERVAL	≥ 5 min (24 hr default)
TEMPERATURE/VOLTAGE	Logged (default = hourly)
GSM SIGNAL STRENGTH	Logged on GSM Connection

INTERFACES

DIGITAL FLOW INPUT

ТҮРЕ	Industry standard, digital 2-wire interface
	plus 3 and 5 wire bi-directional meters
MAX PULSE FREQUENCY	100Hz
MIN PULSE WIDTH	5ms
3 PRESSURE TRANSDUCERS	3 pressures for measuring
	upstream, downstream as well as PRV
	control space (optional).
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 2G and Penta-band 3G
SIM	Field replaceable
	Automatic configuaration
	Supports roaming SIMs

PHYSICAL INFORMATION

 SIZE (mm)
 w115 x d115 x h115

 WEIGHT (kg)
 0.68

ENVIRONMENTAL PERFORMANCE

Designed and tested to IP68

Capable of withstanding extreme environmental conditions of up to 50°C

LOGGING MODES

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

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APV



HYDRAULIC
INTERFACES
Self-bleed
Position feedback to Control Logger
Selection of mounting options
Pilot position indicator
Absolute pressure adjustment
Linear pressure/position relationship

Upstream, Downstream and Control Space connections 3/8" BSP(F)

ELECTRICAL

IP68 connector to i20 Controller

PHYSICAL INFORMATION

SIZE (mm)	w198 x d149 x h130
WEIGHT (kg)	5

ENVIRONMENTAL PERFORMANCE

IP68 continuously submersible to 4m
Operational temperature 1°C to 50°C
Stainless steel (316) construction
WRAS approved

PRV CONTROL HARDWARE

INSTALLATION

Installation of the PRV control hardware should be undertaken by a qualified i2O trained employee or an authorised i2O Service Partner. Standard technician tools are required along with an adjustable C-Spanner 2" to 4 ³/₄, 4" (100mm) Puller, 3mm hex tool, RTV Silcone 744, and the Configurator Software on a laptop or using the Mobile Configurator Android App on a mobile device.

