

## TECHNICAL SPECIFICATIONS FOR PRV CONTROLLER

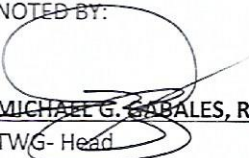
ITEM	SPECIFICATION	STATEMENT OF COMPLIANCE
<b>LTE-M &amp; NBloT - enabled Pressure Control System</b>		
<b>Sensor Input</b>		
2x Analog Inputs	: Internal Pressure Transducer, External Pressure 4-20mA (Optional), 0-20 bar / 0-200meters head / 0-300psig, 0.1% repeatability	
2X Digital	: 2x Uni or Bi-rectional Pulse, Count or Event Logging modes	
<b>Hydraulic</b>		
3x Solenoid Output	: 1x Latching Solenoid, to vent or close the top PRV chamber	
	: 2x Pulsed Solenoid outputs, up/down control battery depletion	
	: Safe level and alerts set to protect	
<b>Controlling Features</b>		
Timed Based	: Up to 96 table entries for 7 individual days per week or setting based on Week Days or Weekends. Calendar special event table also available	
Flow Based	: Flow based control or Flow override option	
Fail Safe	: Default Fail Safe can be configured to "Set" or "Release" the latching solenoid upon error (e.g. faulty sensor/flow) or revert to time profiles if flow fails or revert to fixed pressure (operator selected)	
Clock	: Clock is programmable for seasonal time changes	
Closed Loop	: Optional closed loop control automatically modulating pressure from remote critical point data	
Combination	: Combination of both Time and Flow based with different settings per day	
<b>Communications</b>		
Mobile	: Cellular modem supporting 2G/3G/4G/NBloT/LTE-M(CAT-1)	
Serial	: RS232 or USB Interface for programming and integration with PC/Laptop or Windows Tablet, programmable up to 19,200 b.p.s	
<b>Logger Features</b>		
Frequency	: Variable logger rate from 1s to 24 hours	
Logger/Site ID	: 7 alphanumeric characters, readable factory set serial number in firmware	
Ingress Protection	: IP68 fully submersible	
Dimensions	: 315H x 153W x 87D mm	
Constructions	: Aluminum alloy casing	
Operating Temperature	: -20 to 60 deg Celsius	
Power	: Lithium-thionyl chloride cell operational for 5 years under typical operating conditions	
Alarm	: Multiple alarm options including Rate of Change, Profile, Minimum Night Flow and Threshold. 16 alarms per logger. Can be programmed to auto dial up to 8 telephone number on alarms	
Memory	: Primary Recording 179,760 readings (Cyclic or Block)	
Transient Logging	: High speed logging to 25Hz to identify network transient events	
<b>Accessories (Compliance upon Delivery)</b>		
1. Hydraulic Actuator		
2. Installation kit including hose and quick connect fittings.		
3. Digital Flow Cable (open-ended)		
4. External Battery Pack for PRV Controller with 10-pin Military Connector.		
5. Critical Point Logger		
6. Pressure Hose and Quick Connect Coupling for Critical Point Logger		
7. External Battery for Critical Point Logger with 4-pin Military Connector.		
8. USB Programming Cable		

<b>Additional Requirements</b>	
1. The supplier must be the authorized distributor of the prv controller.	
2. The supplier must have an authority to bid from the manufacturer.	

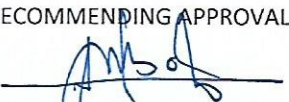
PREPARED BY:

  
JOHN REY M. CAWIT  
TWG- Member

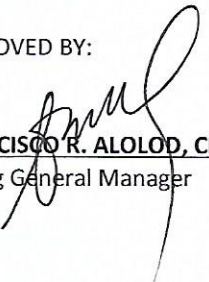
NOTED BY:

  
MICHAEL G. GABALES, REE  
TWG- Head

RECOMMENDING APPROVAL:

  
ROGELIO A. BESANA, JR., CE, RMP  
OTS- Asst. General Manager A

APPROVED BY:

  
FRANCISCO R. ALOLOD, CPA, CESE  
Acting General Manager