

Valve Station RTU's ... from Cla-Val!



Wireless remote monitoring and control of valve stations just got easier!
Cla-Val announces the VSU Series remote terminal units specifically designed to bring valve station information into the office.

Remotely changing set points on modulating valves to control parameters such as level, pressure or flow, opening or closing valves and monitoring sensors and switches are now all possible using wireless Cla-Val telemetry.

Using unlicensed Spread Spectrum Radio telemetry, the Cla-Val VSU series modules provide remote monitoring and control up to 20 miles distance with line of sight antenna communication. Further distances, or transmission around hills or large obstructions are possible using the VSU modules as repeaters.

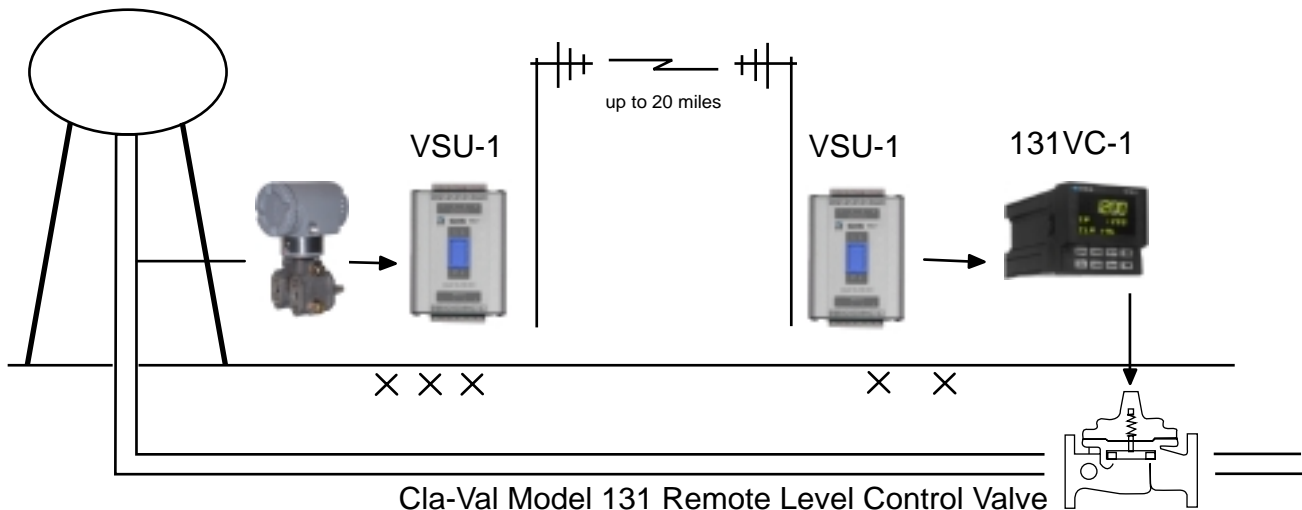
The Cla-Val Valve Station RTU's may be combined with the 131 VC series electronic valve controllers or the 130 VC electronic pilot actuator's for a complete valve station monitoring and control package. Some SCADA valve stations only require On/Off and monitoring of valve parameters. The Cla-Val

VSU series modules will receive all types of sensor and switch inputs and send digital output commands to solenoid's on model 93 pressure reducing, 43 flow control, 58 pressure sustaining valves, and 136 series for solenoid shutoff capabilities. For larger and more complex valve stations, the VSS series expansion modules may be added to accommodate more sensor inputs and control outputs.

The VSC base station RTU module provides an interface to PC's or PLC's using industry standard "Modbus RTU" protocol. It allows commercial SCADA software to link to the valve stations by addressing the input and output registers. It has 4800 registers to send and receive information from all valve stations. A printout of all registers and associated field sensors and controls is provided for software integration.

Wireless Level Control

A typical wireless remote level control system may be easily setup by using 2 VSU-1 modules. One module receives a 4-20 mA level signal at a reservoir and the remote valve VSU module outputs the same 4-20 mA signal into a 131 VC-1 electronic valve controller to modulate the valve or for simple On/Off altitude control the VSU may have setpoints programmed to open the valve at a low level and to close the valve at a high setpoint level.



Valve Station SCADA systems

Using a VSU-1 field module, inlet and outlet pressure transmitters may provide 4-20 mA pressure information at a Cla-Val pressure reducing control valve with solenoid shutoff and CRD-31 electronic actuated pilot control. The VSU-1 sends 4-20 mA commands to the CRD-31 to periodically change setpoints of the modulating valve and digital On/Off commands to the solenoid. The VSU-1 transmits information to the VSC Base Station RTU which is connected to a PC with software for the supervisory control and data acquisition of the valve station. Up to 95 Cla-Val VSU modules may communicate with one Base Station VSC and up to 31 VSS expansion modules may be connected to each VSU module.

V-SCADA Software

For systems requiring valve station monitoring and control Cla-Val offers V-SCADA software.

This simple and easy to use software

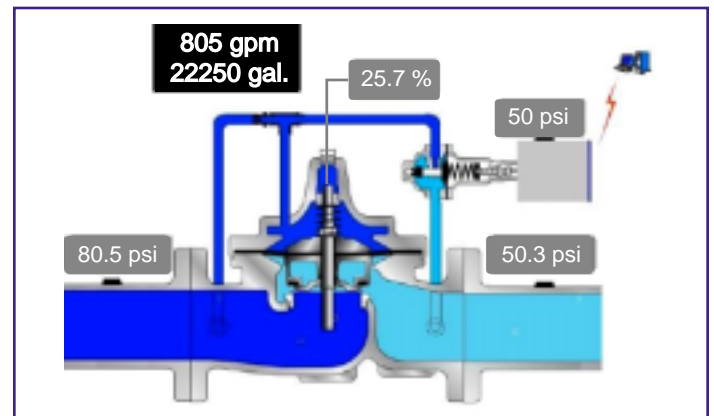
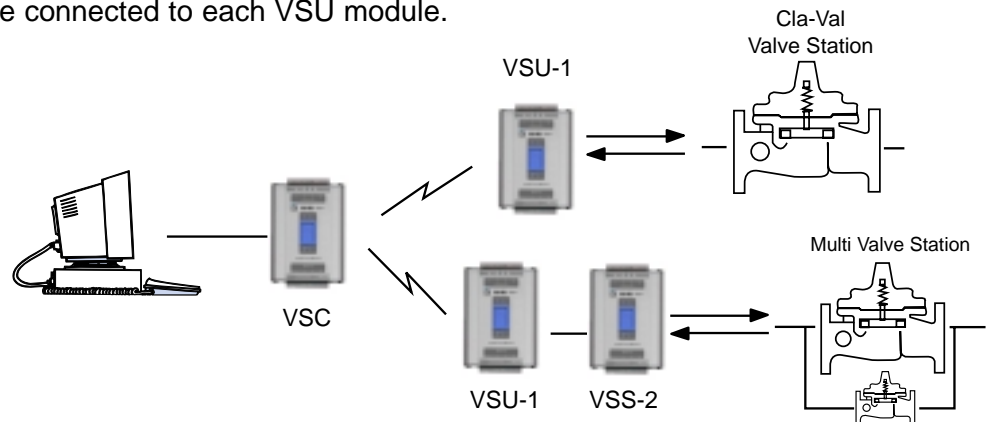
- Communicates to all remote valve stations
- Sends On/Off and setpoint commands to remote control valves
- Graphically presents and logs all current valve parameters at each valve site
- Shows trends of pressure, flow, valve position, and level over a period of time

V-SCADA is a Microsoft Excel based program that is designed to be simple to setup and use. Excels powerful analytical capabilities make this a useful tool.

Cv-FLOW, an optional feature is available to provide remote metering of Cla-Val control valves. Using Cla-Val valve station RTU's, the valve position and pressure drop is periodically read from each valve and flow is calculated and totalized. This makes flow monitoring in water distribution systems very cost effective by requiring only valve sensor installation, an ideal choice for confined space pressure reducing valve stations. The pressure drop may be measured from a differential pressure transmitter or from the difference between inlet and outlet pressure sensors.

For more information visit our website at www.cla-val.com

You can depend on Cla-Val for your electronic valve control solutions.



	VSU-1	VSS-1	VSU-2	VSS-2
Radio	X		X	
Serial	X	X	X	X
Digital inputs	4		4	
Digital outputs	4		1	
Analog inputs	2		6	
Analog Outputs	2		0	
Pulse inputs	1		4	
Pulse outputs	1		0	

Digital inputs X105, VC alarm, level switch, intrusion switch
 Digital outputs Solenoid, alarm, VC-1 digital input, interrupt power
 Analog inputs 4-20 mA pressure, flow, level, differential pressure, etc.
 Analog outputs 4-20 mA setpoint commands, chart recorders, data loggers
 Pulse input Pulse output flow meters - turbine, insertion paddle wheel

CLA-VAL

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