# GLOSSARY of Terms Related to OCV Electronic Products

▶**Amp:** An abbreviation for Ampere, which is a measurement of electrical current flow.

▶**Analog:** A variable signal that is continuous in time and amplitude.

▶**Analog Input:** A voltage or current input to the controller that is a representation of a variable. This input could be a PV, RSP or other analog input device. e.g. 4 - 20mA

▶**Analog Output:** A voltage or current output from a controller to a device. Used for remote monitoring of the valve operation or function. e.g.4 - 20mA

▶**CAN:** Closed Area Network:
This type of system is used between a master controller and a number of slave controllers.

▶**Color Display:** A type of display used in the "Ultra" series of controller that has up to 256 colors.

▶**Cv:** The valve coefficient, used to mathematically relate a valve's position and pressure drop to the flow rate through the valve.

▶**Cycle Time:** This is the period between solenoid on-off, or off-on transitions.

▶**DP:** Differential Pressure
1) the difference in pressure between the inlet and outlet of a valve or orifice plate or 2) the difference in pressure between two different points on a system.

▶**Digital:** Discrete (on/off) values, used to represent information for input, processing, transmission, storage, etc.

▶**Discrete Input:** A digital input or contact closure to the controller that changes from an open to closed, or closed to open state. (e.g. open=24Volts or closed=0Volts)

▶**Discrete Output:** A digital output or contact closure from the controller that changes from open to closed, or closed to open state, e.g. relay contact.

▶**EPROM:** Erasable Programmable Read Only Memory:
A type of memory chip that retains its data when its power supply is switched off. Once programmed, an EPROM can be erased only by exposing it to strong ultraviolet light.

▶**ETHERNET:** The most common wired LAN (Local Area Network) technology.

▶**Field Upgradable:** The ability to upgrade or reconfigure operating parameters of the controller without returning the unit to the factory.

▶**Firmware:** A term used to denote the fixed-usually rather small-programs that internally control various electronic devices.

▶**Flash Memory:** A type of programmable memory to make a unit field upgradeable.

▶**GSM:** Global System for Mobile communications: This unit will communicate with the UVC Controllers to allow remote control and operations by RF communication, much like a dial up modem commonly used for the internet in many homes. This same device could be used to send messages to a cellular phone.

▶**Hardware:** A term used for physical parts. Not to include software, firmware or programming.

▶**Intranet:** A private computer network that uses Internet technologies to securely share any part of an organization's information or operational systems with its equipment and employees.

▶**Internet:** A global system of interconnected computer networks that interchange data by packet switching using the standardized Internet Protocol.

▶**LAN:** Local Area Network: A computer network covering a small physical area, like a home, office, or small group of buildings, such as a school, or an airport.

▶**LCD:** Liquid Crystal Display: A type of display for either graphical or character information.

▶**LSP:** Local Set Point: The control setting on the controller at which it will operate if no other input is used or available.

▶**mA:** Milliamps: A measurement of electrical flow that is 1/1000 of an Amp.

▶**MODBUS:** A serial communications protocol published by Modicon in 1979 for use with programmable logic controllers (PLCs).

Glossary Continued on back...

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Electronic Control Valve Systems Glossary

# GLOSSARY of Terms Related to OCV Electronic Products

▶**Monochrome Display:** A type of display device that has only two colors, e.g. Black & White, Black & Yellow.

▶**NEMA:** National Electrical Manufacturers Association: NEMA provides a forum for the development of technical standards that are in the best interests of the industry and users.

▶**PID:** Proportional Integral & Derivative:
A type of process control that calculates the variation between the PV and the desired Set Point. The amount and rate of change that the valve has to make is determined by a continual proportion process until the valve reaches the set point. The process enhances valve control accuracy.

▶**PLC:** Programmable Logic Controller: A programmable device that uses flash or EPROM type of memory to control the process it is monitoring.

▶**Position Feedback:** A measurement of the valve's percentage of opening that is an input to the controller or other device, e.g. SCADA system.

▶**PV:** Process Variable: A signal representing the parameter, e.g. pressure, flow, etc., that the controller is set up to control.

▶**Remote Access Control:** A type of control software that communicates with the controller to monitor or change operations. This could be done by Intranet or some other serial communications, such as RS232 or RS485.

▶**RSP:** Remote Set Point: An analog input to the controller. This input could be from a SCADA system or other analog device at a remote location.

▶**Resolution:** A measurement of the display density on controllers. UVC Basic has 128x64 Pixels
UVC ULTRA has 320x240 Pixels

▶**RS232:** A serial communication device that is used to control or upgrade the controllers.

▶**RS485:** A serial communication device that can have more than one device connected at a time. This is usually used for CAN type systems.

▶**RTC:** Real Time Clock:
A device the keeps accurate date & time, usually backed-up with an internal battery.

▶**RTU:** Remote Terminal Unit: A device used in SCADA systems to communicate with a PC or master controller from a remote location. These devices may have analog inputs and outputs, as well as discrete inputs and outputs.

▶**SCADA:** Supervisory Control And Data Acquisition:
This is a network of intelligent devices that interfaces with sensors and/or controls devices at a facility.

▶**Scheduling:** A function used in OCV Controllers to allow valve operation to be started and stopped by the RTC or flow totalizer.

▶**SMS:** Short Message Service:
SMS is a communications protocol allowing the interchange of short text messages between mobile telephone devices.
(e.g. GSM)

▶**Software:** A general term used to describe a collection of computer programs, procedures and documentation that perform some tasks on an operating system.

▶**Solar Power:** Energy acquired via solar panels to charge a battery to enable operation of the control system in the absence of external electrical power.

▶**TCP/IP:** A type of Intranet Protocol used on most Local Area Networks.

▶**Terminal:**
1. A device for joining electrical circuits together
2. A device for communicating over a line
3. A telemetry device interfacing to a CAN or SCADA (RTU)
4. Text output device for system administration messages

▶**Touch Screen:** An input device for changing and inputting data on the "UVC Ultra" controller.

▶**Transducer:** A type of device that converts pressure, position, flow, or level to an electrical measurement.
(e.g. Volts, Milliamps, frequency, or pulses)

▶**Virtual Keyboard:** A display on the touch screen to allow alpha or numerical data input

▶**Virtual Key Pad:** A display on the touch screen to allow numerical data input

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