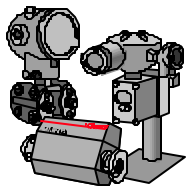
MVA

Multi-Variable Analog Interface for Smart Transmitters



DESCRIPTION

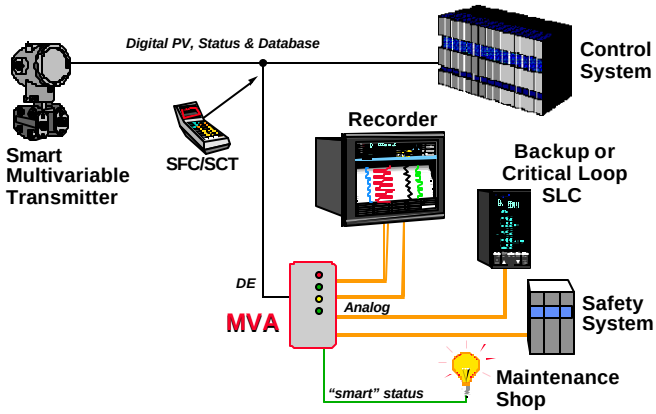
The **Multi-Variable Analog** (**MVA**) interface is an ideal choice for interfacing Honeywell's Digitally Enhanced (DE) Smartline™ transmitters with analog input controllers, safety shutdown systems, and recorders while utilizing the advantages of digital communications.

The **MVA** is fully compatible with all Honeywell Smartline™ transmitters, single and multivariable. This includes the SMV 3000 Smart Multivariable Transmitter, ST 3000 Smart Pressure Transmitters, SGC 3000 Smart Gas Chromatograph STT 3000 Smart Temperature Transmitter and MagneW 3000 Smart Flowmeter.

The **MVA** is also compatible with all Honeywell DE control system interfaces (STDC, STI-MV). Communicators, like Honeywell's SFC and SCT, may be used with **no** disturbances to the module's analog output or status.

Digital Control Integration

with Analog Instrumentation . . .



SAFETY SYSTEM ADVANTAGES

By integrating a transmitter's diagnostic status into the shutdown strategy, the **MVA** enables a solution with less transmitters by providing positive a means of differentiating a *maintenance* problem from a *process* problem while helping avoid process upsets and false shutdowns. By fully supporting forced I/O manual (e.g. Output Mode), the **MVA** enables validation testing of safety shutdown system with handheld devices.

Process Measurement Validation

- **Every Process Measurement Value has Status**
- **Differentiate Maintenance & Process Problems**

PV VALUE	PV STATUS	ACTION
OK	GOOD	SAFE
	BAD	MAINTENANCE REQUIRED
TRIP	GOOD	PROCESS ALARM TRIP
	BAD	MAINTENANCE REQUIRED

Analog **output transmitters have a 66% False Alarm Rate!**
Digital **output transmitters only trip when validated.**

BENEFITS

- Mix DE and Analog instrumentation.
- Enables stand-alone digital operation.
- Enables lower cost solution in dual or triplicated safety systems.
- Leverage wiring savings associated with multivariable transmitters.
- Use Honeywell multivariable transmitters with any analog system.
- Economically extracts PVs and SVs.
- Enables full digital, non-bumping communications for any application.

HOW IT WORKS

MVA works by converting a single transmitter's digital PV into 1-5 volt analog signal(s). In addition, it monitors the transmitter diagnostic status and causes the module's analog output to go fail-safe low in case of bad status.

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FEATURES

- **Up to 4 analog outputs.**
- **Use with single or multivariable transmitters.**
- **Transmitter diagnostic status incorporated into analog output.**
- **Independent transmitter status relay output.**
- **"Output Mode" pass-through.**
- **"Smart status" LED indicators.**
- **Modular DIN rail mount.**
- **Test mode.**

Specifications:

# Input Channels:	1
Input Type:	Honeywell DE, 4 or 6 byte, multivariable
Analog Output(s):	up to 4 @ 1-5 volts, nom. ±10% over/under-range, min.
Analog Output Accuracy:	± 0.045% F.S., into 10 Kohms load, min.
Analog Output Throughput Delay:	50 msec., max. to 99% of new PV/SV value
PV/SV Selection:	PV1, PV2, PV3, PV4 or SV1
Status Relay:	1 Form A and 1 Form B, 5A @ 30VDC, 250VAC, 0.1HP
"Smart Status":	Transmitter status, forced I/O manual mode, DE signal integrity, MVA test mode and MVA fault.
LED Indicators (4):	POWER, RELAY, DE, STATUS
Field Communicator Interaction:	No change to PV/SV value or Status state.
Power Supply:	+22.5VDC to +30VDC, +24VDC nom. @ 80mA., typ. (excludes transmitter)
Connectors:	Screw type, compression, removable, keyed
Module Size:	4.51"(H) x 0.89"(W) x 3.9"(D)
Operating Temperature:	0°C to +60°C, ambient
Enclosure/Mounting:	IP 20 / 35 mm DIN Rail (EN 50022) mounted equipment
CE Conformity (Europe)	This product is in conformity with the protection requirements of the following European Council Directives: 73/23/EEC, the Low Voltage Directive, and 89/336/EEC, the EMC Directive. Conformity of this product with any other "CE Mark" Directive(s) shall not be assumed.
Product Classification:	Class I: Fixed, Permanently Connected, Equipment. (EN 61010-1)
Installation Category (Overvoltage Category):	Category II: Energy-consuming equipment supplied from the fixed installation. Local level appliances, and Industrial Control Equipment. (EN 61010-1)
Pollution Degree:	Pollution Degree 2: Normally non-conductive pollution with occasional conductivity caused by condensation. (ref. IEC 664-1)
EMC Classification:	Group 1, Class A, Industrial Control Equipment (EN 55011, emissions) Generic Immunity, Industrial (EN 50082-2, immunity)
CSA Certification (Canada)	CSA C22.2 No. 205M – Signal Equipment
UL Standard (USA)	CSA NRTL/C, UL 1635 – Digital Alarm Communicator System Unit

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NRTL/C