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.

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

<table>
<thead>
<tr>
<th>PV VALUE</th>
<th>PV STATUS</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>OK</td>
<td>GOOD</td>
<td>SAFE</td>
</tr>
<tr>
<td></td>
<td>BAD</td>
<td>MAINTENANCE REQUIRED</td>
</tr>
<tr>
<td>TRIP</td>
<td>GOOD</td>
<td>PROCESS ALARM TRIP</td>
</tr>
<tr>
<td></td>
<td>BAD</td>
<td>MAINTENANCE REQUIRED</td>
</tr>
</tbody>
</table>

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.

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

<table>
<thead>
<tr>
<th># Input Channels:</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Type:</td>
<td>Honeywell DE, 4 or 6 byte, multivariable</td>
</tr>
<tr>
<td>Analog Output(s):</td>
<td>up to 4 @ 1-5 volts, nom. ±10% over/under-range, min.</td>
</tr>
<tr>
<td>Analog Output Accuracy:</td>
<td>± 0.045% F.S., into 10 Kohms load, min.</td>
</tr>
<tr>
<td>Analog Output Throughput Delay:</td>
<td>50 msec., max. to 99% of new PV/SV value</td>
</tr>
<tr>
<td>PV/SV Selection:</td>
<td>PV1, PV2, PV3, PV4 or SV1</td>
</tr>
<tr>
<td>Status Relay:</td>
<td>1 Form A and 1 Form B, 5A @ 30VDC, 250VAC, 0.1HP</td>
</tr>
<tr>
<td>&quot;Smart Status&quot;:</td>
<td>Transmitter status, forced I/O manual mode, DE signal integrity, MVA test mode and MVA fault.</td>
</tr>
<tr>
<td>LED Indicators (4):</td>
<td>POWER, RELAY, DE, STATUS</td>
</tr>
<tr>
<td>Field Communicator Interaction:</td>
<td>No change to PV/SV value or Status state.</td>
</tr>
<tr>
<td>Power Supply:</td>
<td>+18VDC to +30VDC, +24VDC nom. @ 80mA., typ. (excludes transmitter)</td>
</tr>
<tr>
<td>Connectors:</td>
<td>Screw type, compression, removable, keyed</td>
</tr>
<tr>
<td>Module Size:</td>
<td>4.51&quot;(H) x 0.89&quot;(W) x 3.9&quot;(D)</td>
</tr>
<tr>
<td>Operating Temperature:</td>
<td>0°C to +60°C, ambient</td>
</tr>
<tr>
<td>Enclosure/Mounting:</td>
<td>IP 20 / 35 mm DIN Rail (EN 50022) mounted equipment</td>
</tr>
<tr>
<td>CE Conformity (Europe):</td>
<td>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 &quot;CE Mark&quot; Directive(s) shall not be assumed.</td>
</tr>
<tr>
<td>Product Classification:</td>
<td>Class I: Fixed, Permanently Connected, Equipment. (EN 61010-1)</td>
</tr>
<tr>
<td>Installation Category (Overtoltage Category):</td>
<td>Category II: Energy-consuming equipment supplied from the fixed installation. Local level appliances and Industrial Control Equipment. (EN 61010-1)</td>
</tr>
<tr>
<td>Pollution Degree:</td>
<td>Pollution Degree 2: Normally non-conductive pollution with occasional conductivity caused by condensation. (ref. IEC 664-1)</td>
</tr>
<tr>
<td>EMC Classification:</td>
<td>Group 1, Class A, Industrial Control Equipment (EN 55011, emissions) Generic Immunity, Industrial (EN 50082-2, immunity)</td>
</tr>
<tr>
<td>CSA Certification (Canada):</td>
<td>CSA C22.2 No. 205M – Signal Equipment</td>
</tr>
<tr>
<td>UL Standard (USA):</td>
<td>CSA NRTL/C, UL 1635 – Digital Alarm Communicator System Unit</td>
</tr>
</tbody>
</table>
Sales and Service
For application assistance, current specifications, pricing, or name of the nearest Authorized Distributor, contact one of the offices below.

**Asia Pacific Global Technical Support**

**Field Instruments**
Phone: +(65) 6580 3156
Fax: +(65) 6445-3033

**Australia**
Honeywell Limited
Phone: +(61) 7-3846 1255
FAX: +(61) 7-3840 6481
Toll Free 1300-36-39-36
Toll Free Fax: 1300-36-04-70

**China – PRC - Beijing**
Honeywell China Inc.
Phone: +(86-10) 8458-3280
Fax: +(86-10) 8458-4650

**China – PRC - Shanghai**
Honeywell China Inc.
Phone: +(86-21) 5257-4568
Fax: +(86-21) 6237-2826

**China – PRC - Chengdu**
Honeywell China Inc.
Phone: +(86-28) 6613-5078
Fax: +(86-28) 8678-7061

**China – PRC - Xi’an**
Honeywell China Ltd.
Phone: +(86-29) 8833-1226
Fax: +(86-29) 8833-7490

**China – PRC - Shenzhen**
Honeywell China Inc.
Phone: +(86) 755-2518-1226
Fax: +(86) 755-2518-1221

**Indonesia**
PT Honeywell Indonesia
Phone: +(62) 21-535-8833
FAX: +(62) 21-5367 1008

**Honeywell Automation India Ltd.**
Honeywell Ltd.
Phone: +(91) 6603-9400
Fax: +(91) 6603-9600

**Japan**
Honeywell Inc.
Phone: +(81) 3 6730 7197
Fax: +(81) 3 6730 7228

**Malaysia**
Honeywell Engineering Sdn Bhd
Phone: +(603) 7958-4788
Fax: +(603) 7958-8922

**New Zealand**
Honeywell Limited
Phone: +(64-9) 623-5050
Fax: +(64-9) 623-5060
Toll Free (0800) 202-088

**Singapore**
Honeywell Pte Ltd.
Phone: +(65) 6580 3278
Fax: +(65) 6445-3033

**South Korea**
Honeywell Korea Co Ltd
Phone: +(82) 799 6114
Fax: +(82) 792 9015

**Thailand**
Honeywell Systems (Thailand) Ltd.
Phone: +(662) 693-3099
Fax: +(662) 693-3089

**Taiwan R.O.C.**
Honeywell Taiwan Ltd.
Phone: +(886-2) 2245-1000
Fax: +(886-2) 2245-3243

**SE Asia Countries**
see Honeywell Pte Ltd. (Singapore)
for: Philippines, Pakistan, Cambodia, Guam, Laos, Malaysia, Vietnam, East Timor

**SE Asia Countries**
see Honeywell Automation India Ltd for: Bangladesh, Sri Lanka

**EUROPE**

**Austria**
Honeywell Austria GmbH
Phone: +(43) (1)400123
Fax: +(43) (1)400117

**Belgium**
Honeywell SÀ/NV
Phone: +(32) (0)278 24 07
Fax: +(32) (0)278 22 45

**Bulgaria**
Honeywell EOOD
Phone: +(359) 2 40 20 900
Fax: +(359) 2 40 20 990

**Czech Republic**
Honeywell a.s.
Phone: +(420) 242 442 232
Fax: +(420) 242 442 131

**Denmark**
Honeywell A/S
Phone: +(45) 39 55 55 55
Fax: +(45) 39 55 55 58

**Finland**
Honeywell OY
Phone: +(358) (0)20752 2753
Fax: +(358) (0)20752 2751

**France**
Honeywell SA
Phone: +(33) (0)1 60198075
Fax: +(33) (0)1 60198201

**Germany**
Honeywell AG
Phone: +(49) (69)8064-299
Fax: +(49) (69)8064-97336

**Hungary**
Honeywell Kft.
Phone: +(36-1) 451 4300
Fax: +(36-1) 451 4343

**Italy**
Honeywell S.P.A.
Phone: +(39) 0292146307
Fax: +(39) 0292146377

**The Netherlands**
Honeywell B.V.
Phone: +(31) (0) 20 5656200
Fax: +(31) (0) 20 5656210

**Norway**
Honeywell A/S
Phone: +(45) 39 55 55 55

**Poland**
Honeywell Sp. z o.o
Phone: +(48-22) 6060900
Fax: +(48-22) 6060901

**Portugal**
Honeywell Portugal Lda
Phone: +(351) 21 424 5000
Fax: +(351) 21 424 59 99

**Romania**
Honeywell Bucharest
Phone: +(40) (0) 21 2316437
Fax: +(40) (0) 21 2316439

**Russian Federation (RF)**
Honeywell Field Solutions
Phone: +(7) 495 797 99 64
Fax: +(7) 495 797 99 64

**Slovak Republic**
Honeywell a.s.
Phone: +(421-2) 58247 410
Fax: +(421-2) 58247 415

**Spain**
Honeywell S.A.
Phone: +(34) (91)313161 00
Fax: +(34) (91)313161 30

**Sweden**
Honeywell AB
Phone: +(46) 8 775 55 00
Fax: +(46) 8 775 56 00

**Switzerland**
Honeywell AG
Phone: +41 81522448
Fax: +(41) 1 855 24 45

**Turkey**
Honeywell Turkey A.S.
Phone: +(90) 216 575 71 01
Fax: +(90) 216 575 66 35

**United Kingdom**
Honeywell Control Systems Ltd.
Phone: +(44) (0)1344 655251
Fax: +(44) (0)1344 655554

**MIDDLE EAST**

**Abu Dhabi U A E**
Honeywell Middle East Ltd.
Phone: +(971) 2 4041246
Fax: +(971) 2 4432538

**AFCRA**
Mediterranean & African Distributors
Honeywell SpA
Phone: +(39) (0) 250 10 604
Fax: +(39) (0) 250 10 659

**South Africa (Republic of)**
Honeywell Southern Africa
Phone: +(27) 11 6958000
Fax: +(27) 11 8051504

**NORTH AMERICA**

Canada
Honeywell Ltd.
Phone: 1-800-737-3360
Fax: 1-800-565-4130

USA
Honeywell Process Solutions,
Phone: 1-800-423-9883
Or 1-800-343-0228
Email: ask-ssc@honeywell.com

**SOUTH AMERICA**

Argentina
Honeywell S.A.I.C.
Phone: +(54-11) 4383-3637
Fax: +(54-11) 4325-6470

Brazil
Honeywell do Brasil & Cia
Phone: +(55-11) 7266-1900
Fax: +(55-11) 7266-1905

Chile
Honeywell Chile, S.A.
Phone: +(56-2) 233-0688
Fax: +(56-2) 231-6679

Mexico
Honeywell S.A. de C.V.
Phone: +(52) 55 5259-1966
Fax: +(52) 55 5570-2985

Puerto Rico
Honeywell Inc.
Phone: +(809) 792-7075
Fax: +(809) 792-0053

Trinidad
Honeywell Inc.
Phone: +(868) 624-3964
Fax: +(868) 624-3969

Venezuela
Honeywell CA
Phone: +(58-2) 238-0211
Fax: +(58-2) 238-3391

Specifications are subject to change without notice.
For More Information
Learn more about how Honeywell’s Multi-Variable Analog Interface for Smart Transmitters can provide stand-alone digital operation, visit our website www.honeywell.com/ps/hfs or contact your Honeywell account manager.

Honeywell Process Solutions
1860 West Rose Garden Lane
Phoenix, Arizona 85027
Tel: 1-800-423-9883 or 1-800-343-0228
www.honeywell.com/ps