

# HART Interface Module for MOX Unity Field Controllers

## DATA SHEET

**HART® Interface Modules mounted within MOX Unity Field Controllers allow the benefits of smart measuring instruments to be realized within your MOX control system.**

Highway Addressable Remote Transducer (HART) protocol has become a popular choice in many industries, such as Oil and Gas, Chemical and Petrochemical, and a number of other process industries. HART protocol allows end-users to install smart instrumentation utilizing standard 4-20mA wiring, with benefits that include increased plant availability, reduced maintenance costs and improved regulatory compliance.

The MOX Unity Field Controller is a powerful controller designed for modern SCADA applications where control and information management are intensive. The MOX Unity is a modular controller, with a range of standard serial and TCP/IP communications options, and supports a number of standard protocols including Modbus, DNP3.0 and IEC60870-5-101/4.

By selecting one or more HART Interface Modules for your MOX Unity you can integrate data from your smart measuring instruments with your other discrete control system signals to provide improved control and automation. Furthermore, this data can be transmitted up to your plant control room allowing your operations staff to make more informed plant control decisions.



### Features

HART compliant physical layer specifications

Up to four HART interface modules per  
MOX Unity controller

Internal/External load resistance configurable

Configurable as primary or secondary master

Digital FSK To Analog current isolation

Unloads HART protocol details from  
application software

MOX Unity certified as non-sparking for use  
in explosive atmospheres to IECEx nA II T4



The superior flexibility of MOX Unity Field Controllers allows any mix of HART Interface Modules and standard I/O Modules to be installed together, up to four modules per controller.

## Specifications

| General  |   |
|--|---|
| Number of channels                             | 1 channel per HART Interface Module, and up to 4 modules per MOX Unity Field Controller |
| Baud Rate                                      | 1200bps   |
| Modulation                                     | Bell 202 Frequency Shift Key (FSK)  |
| 1200Hz   | Mark (1)  |
| 2200Hz   | Space (0)   |
| Transmit Signal Level                          | 500mVpp@250 Ohm Load  |
| Receive Sensitivity                            | >120mVpp Guaranteed On, <80mVpp Guaranteed Off  |
| Hardware Configurable                          |   |
| Primary Master / Secondary Master Configurable | Yes   |
| Internal Load / External Load Configurable     | Yes   |
| Isolation                                      |   |
| FSK to 4~20mA Analog DC Current                | 1500Vrms  |
| Power Requirements                             |   |
| Maximum Power dissipation                      | 0.72W   |
| Environmental Conditions                       |   |
| Storage temperature                            | -40°C to 85°C   |
| Operating temperature                          | -20°C to 70°C   |
| Humidity                                       | 5%~95% (non-condensing)   |
| MOX Unity Approvals                            |   |
| CE Approval                                    | Application Field: Industry   |
|  | Noise Emission Requirements: EN 61000-6-4:2007  |
|  | Noise Immunity Requirements: EN 61000-6-2:2005  |
| IECEx Approval                                 | Ex nA II T4   |