

# 10107 HART Protocol Modem with USB Interface



Unitek Systems  
Instrumentation & Controls

## Features

- Complete HART device interface  
USB cable, drivers and HART Mini-Clips included
- Appears as an RS232 Com port to your software  
for increased compatibility with existing software
- Modem is shutdown to save power when port is inactive
- Virtual Com port numbers can be easily changed  
(example: change Com 7 to Com 2)
- Includes drivers for Windows 98, 2000, ME, and XP
- MAC OS-8, OS-9, OS-X, Linux 2.40 or higher, and  
Windows CE 4.2 drivers available
- Complies with HART protocol physical layer
- Transformer isolation simplifies loop connections  
and eliminates grounding effects
- Rugged rubber and stainless steel enclosure  
handles rough field use
- Super low-power design for extended portable  
computer battery life
- 1 Year Warranty

HARTLink provides the hardware interface between Highway Addressable Remote Transducer devices (HART®) and a Windows® PC. Universal Serial Bus (USB) drivers make HARTLink compatible with most software developed for RS232 serial port interface modems. HARTLink appears as an RS232 Com port to your software. Unlike using a USB to serial converter with an RS232 modem — HARTLink and included software drivers take care of timing and handshake issues unique to the HART protocol. A rugged design makes HARTLink an ideal choice for field engineers and technicians who service HART devices in an industrial environment. HARTLink is compatible with all certified HART devices and all leading HART configuration and monitoring software that use an RS232 serial port for the interface. For a HART modem with an RS232 interface see 10105.

## Specifications

### Enclosure

Molded Buna-N 90 Durometer Rubber with Stainless Steel Cover	
Weight .....	5 ounces
Modem Dimensions .....	1.75" x 2.375" x 0.5"

### USB

Connector .....	USB-A
Cable Length .....	6 feet (3 Meters)
Compatibility .....	USB 1.1 and USB 2.0
Active Current .....	30mA Max
Suspend Current .....	Less than 200µA Typical

### HART

Termination .....	Pamona Electronics Mini-Clips
Leads .....	1 Foot High Flexibility Test Lead Wire
Connection Method .....	Transformer Isolated, Capacitor Coupled
DC Loop Voltage .....	50Vdc Max
Demodulation Jitter .....	12% of 1 bit Typical
Carrier Detect Threshold .....	100mV Typical
Leakage to Process Loop .....	±10µA Max

### Environmental

Operating Temperature .....	-20°C to 60°C (-4°F to 140°F)
Storage Temperature .....	-40°C to 85°C (-40°F to 185°F)
Humidity .....	0 to 99% (non-condensing)

The HART protocol is supported by the HART Communications Foundation in Austin Texas, [www.hartcomm.org](http://www.hartcomm.org). HART is a registered trademark of the HART Communications Foundation.

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**Unitek Systems**

Instrumentation & Controls  
#25 - 12268 189a St  
Pitt Meadows, BC, V3Y 2M7  
Tel: 604-992-4831  
E-Mail: [sales@uniteksys.com](mailto:sales@uniteksys.com)