

# PowerXpress™ HART® Field Device Power Supply INSTRUCTION MANUAL



Patent US 8,344,542

Warranty: 1 year from date of purchase, limited to workmanship and materials.

## Specifications:

General Purpose Use Only  
Isolation: 500V  
Output: 24VDC @ 40mA  
Input: 5VDC (USB) @ 225mA

## Approvals:

CE Conformity EMC Directive (2004/108/EC) IEC 61326

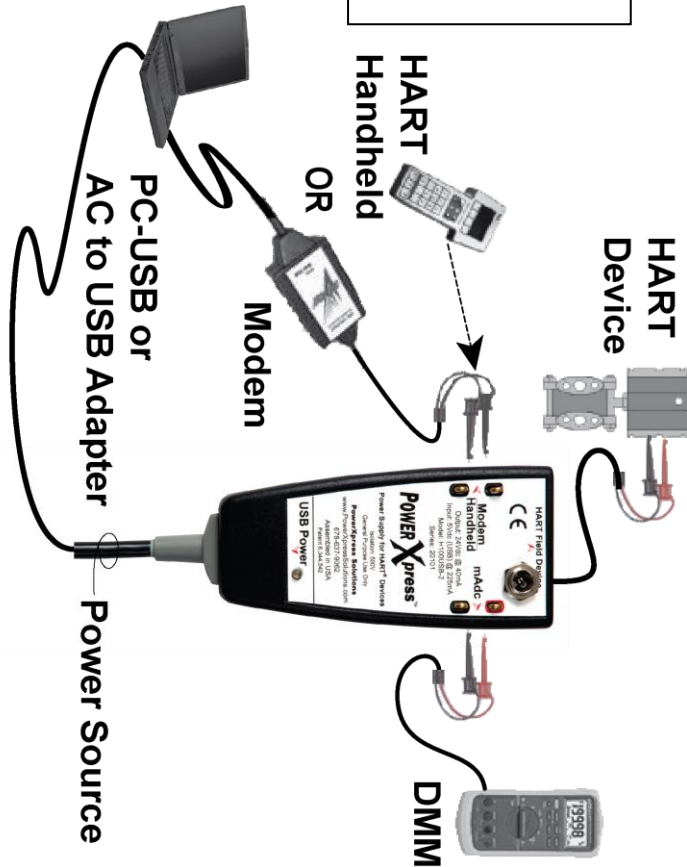
## Country of Origin:

Manufactured and Assembled in USA from imported parts

## Contact Information:

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**Includes: PowerXpress  
Field Device Power  
Supply, Field Device  
Power Cable, AC to USB  
Power Adapter and  
Instruction Manual**



**PowerXpress Field Device Power Supply Hook-Up Diagram**

## PowerXpress™ HART® Field Device Power Supply

### INSTRUCTION MANUAL



Thank you for purchasing the PowerXpress HART® field device power supply. This power supply was designed to simplify the configuration, testing and troubleshooting of any HART® registered field device.

The PowerXpress utilizes the power available from your Laptop PC's USB 2.x port and converts it to 24Vdc to provide 2-wire power for HART® field devices. The power supply includes the necessary HART® communication load resistance and provides a quick modem and/or milliamp meter connection. An 110VAC to USB adapter is also included with this product. With this setup all the necessary connections to the device are made with a single pair of mini-grabbers. See the hook-up diagram on back page.

A modem and/or milliamp meter is quickly connected to the PowerXpress with standard mini-grabbers using the quick-connect access pins on the left and right sides of the device. Modem and milliamp meter not included.

## Connecting the PowerXpress

There are 4 connections available on the PowerXpress:

- 1) **USB Power Source Cable** – Connect the USB A plug to an available USB A port on your PC. (Powered USB 2.x compatible port required.) When power is applied, the green power on light will illuminate. Connect the mini-grabber y-cable plug into the jack on the top right of the PowerXpress. See hook-up diagram on back page.
- 2) **HART® Field Device Power Cable** – Connect the red (+) & black (-) mini-grabbers to the device power terminals to power the 2-wire HART field device. Red = + 24Vdc, Black = gnd.
- 3) **HART® Modem or Handheld Quick Connect Access Pins** – Connect the HART® modem or HART® handheld communicator (not included) mini-grabbers to the PowerXpress modem pins on the top left side of the PowerXpress (both black because they are not polarity sensitive) to enable full HART communication.
- 4) **Milliamp Meter Quick Connect Access Pins** – Connect the milliamp meter (not included) mini-grabbers to the PowerXpress mA pins on the top right side of the PowerXpress (red/black which are polarity sensitive) to measure the milliamp output from the HART device.

The PowerXpress is designed to power one device at a time. The mini-grabbers at the end of the HART Field Device cable allow you to quickly move from one device to the next with an absolute minimum of setup time. This is particularly valuable when setting up numerous devices on the bench, for example.

The PowerXpress may be powered by any USB 2.x compatible power source or the included 100 / 240 VAC, 50/60 Hz power source using the included AC to USB adapter.

The PowerXpress is designed to allow quick connection of either a HART® modem or handheld communicator using mini-grabbers. See hook-up diagram on back page.

Be sure visit [www.powerxpresssolutions.com](http://www.powerxpresssolutions.com) for more information and to find additional products.