

CTC AppNotes

A series of technical documents written by members of the CTC community

Signal Conditioner Enclosures with Ethernet Output Options

For many Years the vibration industry has depended on analog outputs from sensors for trending and process monitoring. Recently digital outputs are more frequently turning up as the method of process monitoring. PRO has adapted one of our most popular analog output enclosures to provide outputs using modern Ethernet technology.



Figure 1. PRO XE550 Ethernet enabled signal conditioner enclosure

New XE550 and XE650 ethernet enabled signal conditioner enclosures are now available. The enclosures have replaced the terminal blocks where the 4-20mA output wires from the signal conditioners to the local control system used to land with a new Advantech ADAM 6117 Module. The enclosures still offer easy plug and play operation in a slightly redesigned package. Sensor inputs and power inputs are landed on a set of terminals near the point of cable entry from the sensor, and the output is a simple ethernet cable attached to the ADAM module. All other internal wiring is done at the factory allowing for installation and setup of the enclosure in an extremely short period of time.



Figure 2. XE550 and XE650 ADAM ethernet output Module

The ADAM 6117 modules are available with Ethernet IP, ModBus or PROFINET output options to accommodate most digital control systems. Highly resistant to interference, the outputs from the ADAM module are proportional to the output from the sensor and the sensors are sampled as often as 10 times per second for real time monitoring of Vibration and or

temperature. The XE550 and XE650 enclosures can be configured for up to 8 vibration and 8 temperature outputs for a total of 16 channels out. XE550 and XE650 enclosures can be daisy chained together to provide a single ethernet cable run from the enclosure locations back to the control room, reducing cost and improving the efficiency of installations.



Figure 3. XE650T enclosure with two 8 channel output modules for 16 channels of data output.

If you have any questions feel free to contact CTC directly. Call toll free 1-800-999-5290 in the US/Canada or +1-585-924-5900 internationally, or alternatively, email techsupport@ctconline.com.