

New Fiber Optic Multiplexers from Weed Instrument Improve Reliability of Emission Monitoring Systems

A new line of Fiber Optic Converters, designed to multiplex CEMS (Continuous Emission Monitoring Systems) 4-20mA and 0-10VDC output signals at coal-fired power stations, has been introduced by Weed Instrument of Round Rock, Texas, USA.



Monitored emissions include sulphur dioxide (a gas which contributes to the formation of acid rain), nitrogen oxides (which are a precursor to the formation of low-level ozone, commonly known as “smog”) and particulate matter. Conversion of the analog signals to fiber overcomes many of the application issues such as EMI/RFI, lightning strikes and ground loop problems that are frequently encountered in successful operation of CEMS equipment.

The 2Mxx Multiplexer provides bi-directional communications, sending and receiving up to eight analog or digital signals over a pair of fiber optic cables. Several available modules, including RS-232/485, 4-20mA, 0-10VDC and contact closure, make the new fiber optic multiplexer adaptable to the configurations of many different systems.

The Multiplexer’s base unit connects to the fiber optic cable and provides visual indication of fiber link status. The base unit receives information from up to four cascable input modules; each input module communicates with a partner output module on the opposite end of the fiber. An integrated backplane allows for communications between modules without the need for inter-modular wiring.

The base unit and all its connected input/output modules can receive power from the standard EOtec 2000 power supplies (120/240 VAC, 125 VDC or 24 VDC) or from an external 24 VDC power supply connected directly to the base unit through a pluggable screw terminal connection.

For more information about the new 2Mxx Multiplexer, contact Rick Pennavaria, Weed Instrument Company, Inc., 707 Jeffrey Way, Round Rock, Texas, 78664 USA. Phone 512-434-2850; Fax 512-434-2851.

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