Tidal's Web-Enabled eChamber Gateway Monitors and Logs Temperature Controllers and Up to 256 Sensors

Instrument Connects to the Internet via its On-board 10 BASE-T Ethernet Interface, or Optional GSM Cellular, or 36 Kbps Modem

Randolph, NJ, May 8, 2003...Tidal Engineering, a leader in the design and development of embedded hardware and software for test and measurement and data acquisition applications, today released the eChamber Gateway, a feature-rich Ethernet gateway and data logger developed specifically for monitoring temperature controllers. Designed to offer engineers and technicians unsurpassed flexibility, the device unites three communication capabilities and a robust thermocouple monitoring system into one instrument. The eChamber Gateway connects the industry's most popular environmental chamber temperature controllers to a LAN or the Internet via its standard on-board 10 BASE-T Ethernet interface, or optionally via an internal 36 Kbps modem, or external GSM cellular modem to facilitate wireless communication. Moreover, each module packs a 16-channel thermocouple monitoring system which, when joined in a 16-unit master/slave RS-485 daisy chain arrangement, enables the monitoring and data logging of 256 sensors on a single Web server. The device's unparalleled communication capabilities, coupled with the eChamber Gateway's capacity to acquire, analyze, and rapidly furnish precise data through its thermocouple monitoring system, empower it to effectively replace conventional chart recorders.

The eChamber Gateway is ideal for employment in environmental test applications when attached to temperature, power, and process programmer/controllers in a wide range of

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commercial, industrial, consumer and military product testing and manufacturing applications. The instrument may be confidently used in batch process, electroplating, foodservice equipment, furnace/ovens, medical and dental equipment, packaging, plastic processing, pulp and paper, along with semiconductor product manufacturing. Listed among the environmental test chambers for which Tidal's eChamber Gateway may be specified are the tens-of-thousands of the third-generation VersaTenn III chambers from SPX's Tenney and Lunaire Environmental divisions, together with Watlow Electronic Manufacturing Company's 942 and F4 Series. The eChamber gateway is supported by Tidal's PC-Based Multi-Chamber Environmental Lab monitoring software, eChamber Manager.

The instrument is easily configurable to automatically transmit reports, data and alarm conditions via e-mail. Further, Tidal's new device creates and serves HTML reports, and functions as an Internet Service Provider (ISP) when answering dial-up-networking calls and providing seamless connections to standard Web browsers. The eChamber Gateway's 16-channel thermocouple monitoring system supports T, C, J, K, E, and R-type thermocouples, 0.1^{o} C resolution, and 4-20 mA (DC) or 0-5V (DC) inputs. This system features built-in cold-junction compensation and provides two digital-to-analog output channels to transmit two analog voltages for control and charting. In addition, a Form C alarm relay is programmable to energize an audible or visual annunciator. Its operating temperature range is 32° to 140° F, and external power requirement is 5 W at 9 to 28 VDC. Measuring 7.000" (L) X 5.000" (W) X 1.625" (H), the eChamber Gateway additionally boasts a backlit LCD, and may be ordered with up to 8MB nonvolatile flash memory.

Pricing for Tidal's eChamber Gateway starts at $475. each, in single unit quantities. Delivery is from stock to 6 weeks.

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__About Tidal Engineering__
Headquartered in Randolph, NJ, Tidal Engineering Corporation has been designing and building award-winning embedded hardware and software for test and measurement and data acquisition applications since 1992. The company further provides product development services together with engineering support, and is recognized for technical expertise in such areas as Embedded IEEE 488, and turnkey SCADA (Supervisory Control and Data Acquisition) systems. Tidal's products are available exclusively through ADI American Distributors Inc., an ISO-9002 certified distributor of electronic and electromechanical components and assemblies.