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## **MODEL 9009 MULTI-FUNCTION MODBUS RTU INTERFACE BOARD ANNOUNCED BY ICS ELECTRONICS**



PLEASANTON, CA, January 24, 2014. Today ICS Electronics announced a new Multi-function Modbus RTU Interface board for controlling RS-232 and RS-485 Modbus RTU devices. Called the Model 9009, this new interface board allows Temperature Chambers and other Modbus controlled slave devices to be controlled from an Ethernet, GPIB or USB source or test system. The Model 9009 is designed for OEM applications to add industry standard interfaces to Temperature Chambers, Temperature Plates or other Modbus RTU slave devices so that they can be easily controlled from standard test programs or industrial PLCs.

The 9009's Ethernet port supports VXI-11 and raw socket protocol, Modbus TCP/IP conversion and an internal HTML web server. VXI-11 and raw socket commands can be used to control the 9009 or any connected Modbus slave devices. Modbus TCP/IP packets are directly converted into Modbus RTU packets. The 9009's WebServer includes a Control Page that lets the user enter 9009 or device commands from any web browser. The 9009 does all of the Modbus RTU packet formatting and handles the response packets. Device responses, Modbus status and error conditions are displayed for the user on the Control Page. Switching between the different protocols is automatic and does not require any effort on the user's part.

The 9009's GPIB interface is IEEE-488.2 compliant. GPIB command strings can be used to control the 9009 or be converted into Modbus RTU packets to control any connected Modbus devices.

The 9009's USB interface utilizes Microsoft's Universal Serial Driver that operates on any Windows PC. Using the Microsoft driver avoids future driver issues as Microsoft releases new versions of Windows.

The 9009 has both RS-232 and RS-485 interfaces so it can be connected directly to a single Modbus slave device or it can be connected to multiple Modbus devices via an RS-485 network.

The Model 9009 is a VXI-11.3 compliant interface and can be used with LXI test systems. The 9009 generally complies with the LXI Specification for core instruments and is fully IEEE-488.2 compliant. The 9009's VXI-11 compliance means that it can be easily controlled from virtually any computer. On WIN32 computers, the 9009 can be easily controlled through a industry standard VISA libraries and integrated into a LabVIEW, VEE, C language, Visual Basic or VB.NET test program. On computers with Linux, Unix or similar operating systems, the user can control the 9009 with RPC (Remote Procedure Call) calls. The VXI-11 Specification provides the RPCL information necessary for any Unix/Linux programmer to develop the RPC calls.

The 9009 is easily adaptable by an OEM to be part of his system. The OEM can store a custom IDN message and other interface parameters in the 9009's Flash memory. The user can also alter the appearance of the HTML pages used by the 9009's WebServer to include the user's company name, logo, color and even modify the HTML page layout. The 9009 includes two prototype HTML control pages for a Temperature-Humidity Chamber with a Watlow F4 and a Temperature Plate with a Watlow EZ Zone Controller that an OEM can adapt to his product.

The 9009 is a small 5.5 inch square board that is designed to be mounted on the rear panel of the host chassis with the connectors protruding through the rear panel. The 9009 is designed so the connector shells will make an RFI tight seal with the rear panel.

Pricing for the Model 9009 is \$495.00 each in quantities of 1 to 4 units, FOB Pleasanton, California. Delivery is 1 to 4 weeks ARO.

ICS Electronics is a pioneer and leader in the design and development of IEEE 488/GPIB, Serial and VXI-11 products. The 9009 is a second generation Ethernet to Modbus Interface and provides increased speed and additional functions and protocols over the older Model 8099.

**ICS Electronics** is headquartered at 7034 Commerce Circle, Pleasanton, CA 94588. **Phone (925) 416-1000. Contact Jerry Mercola, Marketing Manager for more information.**

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