The Control Zone

Total Solution for all your Control Needs

Micro Control Systems

The MCS-POWERMETER:

- *Monitor Voltage (single or three phase)*
- *Provide Energy Usage (KWH)*
- *Provides Real Power (KW)*
- *Provides Power Factor*
- *Uses Rope Current Transformers*
- *80 - 600 VAC (phase to phase)*
- *Makes over 50 electrical measurements*
- *Communication interface is an RS-485 serial connection which uses Modbus protocol*
- *Data updates occur every second*
- *USB port for quick and easy setup and diagnostics using your laptop or a computer*
- *Din Rail Mounting or use built-in Din rail channel*
- *Viewpoint Software for your PC*

The MCS-POWERMETER coupled with the MCS-MODBUS provides the MCS-MAGNUM the information to allow calculation of tonnage and KW per ton.

The unit is line powered and therefore does not require external power.

The ViewPoint software is designed to let you easily configure the unit for different current transformers, check readings, and verify the correct setup.

MCS-BMS-GATEWAY

- *Multi-protocol flexibility*
- *Ease of use*

Original Equipment Manufacturers (OEMs) develop products and systems for heating, cooling, lighting, power generation, metering, environment control, and safety that need to communicate with each other or need to be integrated into higher-level building, industrial, or facilities management systems.

The MCS-BMS-GATEWAY is a microprocessor based communication device that provides translation from BACnet IP to LonTalk, BACnet MSTP, or Johnson Control N2. Information that can be transmitted includes the status of control points, alarm information, digital inputs, analog inputs or setpoints.

The MCS-BMS-GATEWAY protocol is field selectable by setting jumpers on the device. Using MCS-CONFIG and the CONFIG file for the MCS-CONTROLLER, you can automatically create the program that is required by the MCS-BMS-GATEWAY.

www.mcscontrols.com

MCS Technology Updates . . .

MCS is working on two new expansion boards that will be released sometime in the last quarter of 2016.

MCS-RO EXPANSION BOARD
10/20 Relay Outputs on board

The new expansion board is expandable! Two layers, each consisting of 10 relay outputs. Each layer of 10 outputs can have a different I/O communication address which must be consecutive.

The MCS-RO provides a total of 20 relay outputs fused at 6.3 amps each using standard 5 x 20mm fuses. This allows for easy field replacement. Each relay output provides common, normally open and normally closed contacts on a removable terminal block. The terminal blocks provide screw connections which eliminate the need for stacons. Because the terminal blocks are removable, board replacement requires no wires to be removed.

The MCS-RO provides a flexible and cost effective way to allow relay output expansion for an MCS-CONTROLLER. Each MCS-RO has a stand-alone microprocessor which communicates with a MCS CONTROLLER over the MCS-I/O port at 38,400 baud. All data is check summed with auto error correction. Because the communication is over a RS-485 long distance two-wire differential network transmission system, the MCS-RO may be located up to 5,000 feet away. Each MCS-RO board is equipped with a dual voltage power transformer and an automatic power fail reset system.

MCS-SI EXPANSION BOARD
16/32 Sensor Inputs on board

The board is constructed in two layers, each consisting of 16 relay outputs. Each layer of 16 outputs can have a different I/O communication address which must be consecutive.

The MCS-SI provides 32 sensor inputs. The inputs are universal and support either a digital or analog input signal. The MCS-SI also provides four analog outputs that provide independent dc voltage outputs from 0 to 10vdc.

Each input and output consists of a three position removable terminal block, providing +5vdc, ground and signal in. A polyfuse protects the +5vdc line from shorted sensors.

The printed circuit board is a four layer board with a separate power and ground plane to provide the ultimate in efficient electrical noise suppression. This coupled with noise suppression circuitry makes the MCS-SI virtually impervious to electrical noise.

> *The three great essentials to achieve anything worth while are:*
>
> *"Hard work, Stick-to-itiveness, and Common sense"*
>
> *Thomas A. Edison*

Thoughts *from the Editor . . .*

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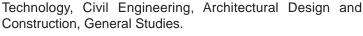
You can also use the 'SCROLL WHEEL' to move between pages. Real handy when viewing large pdf documents

MCS *Family*

Our employees are one of the greatest assets we have.

Michael A. Schreiber,

CAD Specialist, graduated from Florida Southwestern State College in 2014 with Associates Degrees in Drafting and Design Technology, Civil Engineering, Architectural Design and Construction, General Studies.

He is currently working on an Associates degree in Computer Programming and Analysis at Florida Southwestern State College, 'in his spare time'.

When not at work, he enjoys relaxing at home with his family and playing with his son.

The family enjoys their visits to Disney World in Orlando, FL. Mike also enjoys his super heros (mainly Superman).

Thoughts on working at MCS;

"I couldn't wish, hope, or pray for a better company to work for. This company from the owners to the last employee, takes great pride not only in a quality product, but great pride in one another abilities to make MCS products better than the rest."