MSSR-24

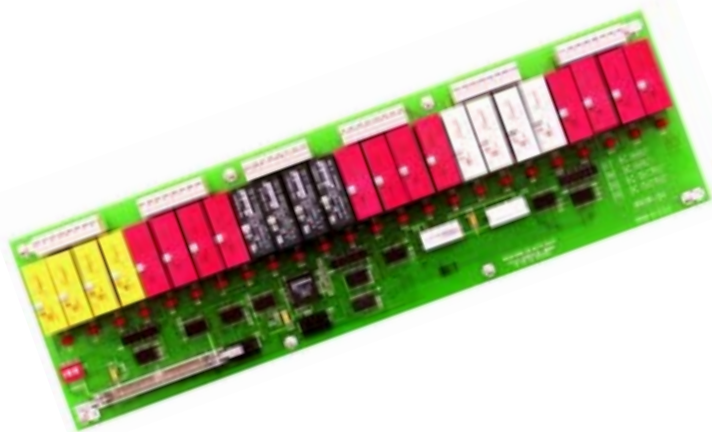## 24-Bit Solid-State I/O Module Rack for the MetraBus

Functional Description

The MSSR-24 is a 24-channel board that provides complete optical isolation for both high- and low-power switching applications. Each MSSR-24 monitors and controls 24 individual I/O points via optically isolated, solid-state, plug-in modules. The MSSR-32 uses industry standard, full-size solid state I/O modules. A variety of these modules are available in both input and output configurations. Voltages of 120/130 Vac, 0 to 60 Vdc, and standard European line voltages can be sensed and controlled. The standard modules offer 4000 volts of electrical isolation and offer output currents up to 3 amps.

Some common uses of the MSSR-24 include computer control of pumps and compressors, ON/OFF motor control, energy and HVAC management, alarm monitoring and activation, temperature control as well as numerous other monitoring and control functions.

The MSSR-24 uses three consecutive addresses on the MetraBus. This allows a single MDB64 series interface board to access up to 16 MSSR-24 boards, providing control of up to 384 individual I/O points. The MSSR-24 board has three, 8-bit ports. Writing to a port loads data into the output latches and to the I/O modules themselves. Reading data from an output module returns the data currently in the output latch without changing it. This feature allows the user to verify that the data on the outputs has been received correctly. Reading an input module returns the value of the input. Inputs and outputs may be mixed within a port. All MSSR-24 modules are set to the OFF state at power-up or upon a software CLEAR.

Detachable screw terminals on the MSSR-24 simplify field wiring, and accept standard 12-22 AWG wire sizes. The MSSR-24 is compatible with all MetraBus mounting and installation chassis and hardware, making it easy to install the boards in NEMA chassis, in 19-inch rack, on DIN rails, or on any flat surface.

MetraBus programming is very easy. You may write direct register I/O programs, take advantage of the Universal Library, or use SoftWIRE, DAS Wizard, or any of a wide variety of compatible software packages.

Specifications

Digital Input / Output

Number of channels	24 (3 banks of 8 modules)
Address space requirement	4 consecutive address locations in the MetraBus address space

Connectors

Module I/O connector type	Detachable screw terminal
Voltage rating	300 V max.
Wire sizes	12-22AWG
External power connector	4-pin PC power type

Power Consumption

+5V (all modules in off state)	250 mA typical, 300 mA max.
+5V (all modules in on state)	375 mA typical, 425 mA max.

Environmental

Operating Temperature:	0 to 70°C
Storage Temperature:	-40 to 100° C

Physical

Size:	16 x 4.8 inches (40.64 x 12.192 cm)

Ordering Guide

I/O Modules

SSR-ODC-05	0-60 Vdc output module
SSR-ODC-05A	0-200 Vdc output module
SSR-OAC-05	24-140 Vac output module
SSR-OAC-05A	24-280 Vac output module
SSR-IDC-05	3-32 Vdc input module
SSR-IDC-05NP	10-32 Vdc / 15-32 Vac input module
SSR-IAC-05	90-140 Vac input module
SSR-IAC-05	24-280 Vac input module

MSSR-24	24-point MetraBus solid state I/O module rack