DIN-RAIL MOUNTABLE
INTELLIGENT SERIAL PORT MULTIPLIER

• Increase 1 serial port to 2 or 3 “Advantage Ports” (User Specified)

• AB DF-1 FD CRC or BCC and Modbus RTU and ASCII

• Each port independently configured for RS-232 or RS-422/RS-485

• Each port independently configured for 300 to 19.2 K baud

• 90-264 AC or 24 VDC powered

The MULTII-PORT™ is an intelligent and compact module that can efficiently connect more than one serial device to a device that only has one serial communications port.

The Miille Applied Research Co., Inc. (MARC) Model 366-10P MULTII-PORT™ port multiplier increases a single serial port to two or three ports. The MULTII-PORT™ mounts on a standard DIN mounting rail and is offered in both AC and DC powered versions. This compact, low power module can enhance the functionality of a variety of serial communication devices.

An intelligent serial port-sharing device — not a simple port multiplexer.

The MULTII-PORT™ module is based on a powerful microprocessor that allows intelligent processing of messages — rather than just simply multiplexing them. All incoming messages received at the “Advantage Ports” are processed, as required, utilizing the selected protocol and presented to the “shared port” on a first come, first serve basis. If two or more messages arrive at the same time, they are serviced one at a time in a “round robin” process. Messages are not lost or garbled.

Each port can be independently user-configured for RS-232 or RS-422/RS-485 and each port’s data transmission rate can be set from 300 to 19.2 K baud. The protocol is determined by the applicable “shared port” device and is specified at order time.

The MULTII-PORT™ was designed to allow users to connect more than one local serial device to a device with a single serial port efficiently and economically. The compact, flexible and configurable design of the module permits connectivity to an extensive variety of serial devices, while adhering to space, power, wiring and communication specifications.
EXAMPLE APPLICATION:

Enhanced Local PLC

A PLC’s single serial port can now be multiplied to accommodate up to 3 local serial devices:

Connect the PLC’s single serial port to the Model 366-10P MULTII-PORT’S™ “Shared Port”. Then connect a local operator interface and two modems (to communicate with remote PLCs) to three of the “Advantage Ports” and there is still another available “Advantage Port” for a local programming PC.

As shown in the example application, multiple local serial devices communicate directly with the local PLC. The combination of connections, configurations and serial devices allowed by the MULTII-PORT™ provide a wide range of possible applications.

The DIN rail mounting and low AC or DC power requirements make the optimum placement and proximity of the MULTII-PORT™ achievable in most every application.

Specifications

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<th>Physical</th>
<th>DIN rail mountable unit 1.75”W X 5.5”H X 5.75” D</th>
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| Power Requirements | AC power 90 to 264 VAC 1 Watt*  
DC power 24 VDC 40ma*  
*maximum operating power for a 5-port unit |
| Operating Environment | 0º to 60º Celsius  
10% to 90% relative humidity (non-condensing) |
| LED Indicators | Provide status of the following signals: TXD and RXD for each port plus ERROR and ACTIVE |
| Protocols | Call or check Web Site for supported protocols  
Custom Protocols available, contact factory for pricing |

| I/O Ports | Maximum of 4 serial data ports  
1 Common port, factory set at 19.2 K baud  
Up to 3 “Advantage Ports” each factory set at 9600 baud or each user configured from 300 to 19.2 K baud |
| Serial Port Connections | Connector P1 to P4: 9-pin “D” connector (male)  
or 9-pin pluggable strips |
| Order Information | 366-10P-XYZ  
P=3 for 3 serial ports, 4 for 4 serial ports  
X=1 for 90-264 AC, 2 for 24VDC  
Y=1 for 9-Pin "D" connectors, 2 for terminal strips  
Z=1 AB-DF1, 2 Modbus |
| Certifications | UL 121201 & CAN/CSA C22.2 No. 213-17,  
Nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous Locations |

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