The Revolutionary 2300M Intelligent Multidrop Modem

Data Multidrop Self-Healing Ring
Optical Modem Network
The only self-diagnostic modem solution available.

MERIDIAN
TECHNOLOGIES

700 Elmont Road
Elmont, NY 11003
Phone: 516 285-1000
Fax: 516 285-6300
www.meridian-tech.com

MERIDIAN
TECHNOLOGIES

THE 2300M INTELLIGENT MULTIDROP MODEM

The 2300M represents the state-of-the-art in fiber optic data modems for multi-drop linear, standard ring and self-healing ring network configurations.

In a self-healing ring configuration, the modems send a proprietary signal around the ring that continuously monitors the network's integrity and will detect and report faults and automatically reconfigure the data path to bypass the fault to provide uninterrupted service. In addition, Meridian's unique and exclusive SpectraSmart diagnostic management system will identify and isolate the specific fault and report both locally on each modem and back to the master controller. The network can be configured in the field for a variety of data formats including RS-232, RS-422 and RS-485 (both 2 and 4 wire). The 2300M is clearly the leader for today's network data communications needs.

Built-in Network Diagnostics Utilizes Meridian's SpectraSmart™ Network Management System

Equipped with onboard network diagnostics, these intelligent modems continually monitor the networks integrity and report back the operational status of each modem both locally and to a remote controller via the network's master modem. Each modem's user-friendly menu can be accessed and viewed via controls and an LCD display located on the front panel on each master/slave modem. The operational status of any modem can be viewed on the SpectraSmart System. Field technicians can use the fiber network itself to perform complete diagnostic testing — eliminating the need for additional diagnostic equipment and unnecessary truck rolls. Parameters viewable on the LCD display include optical ring status, location of fiber breaks, internal modem temperature, power supply voltages, failures and many other parameters critical to proper network operation.
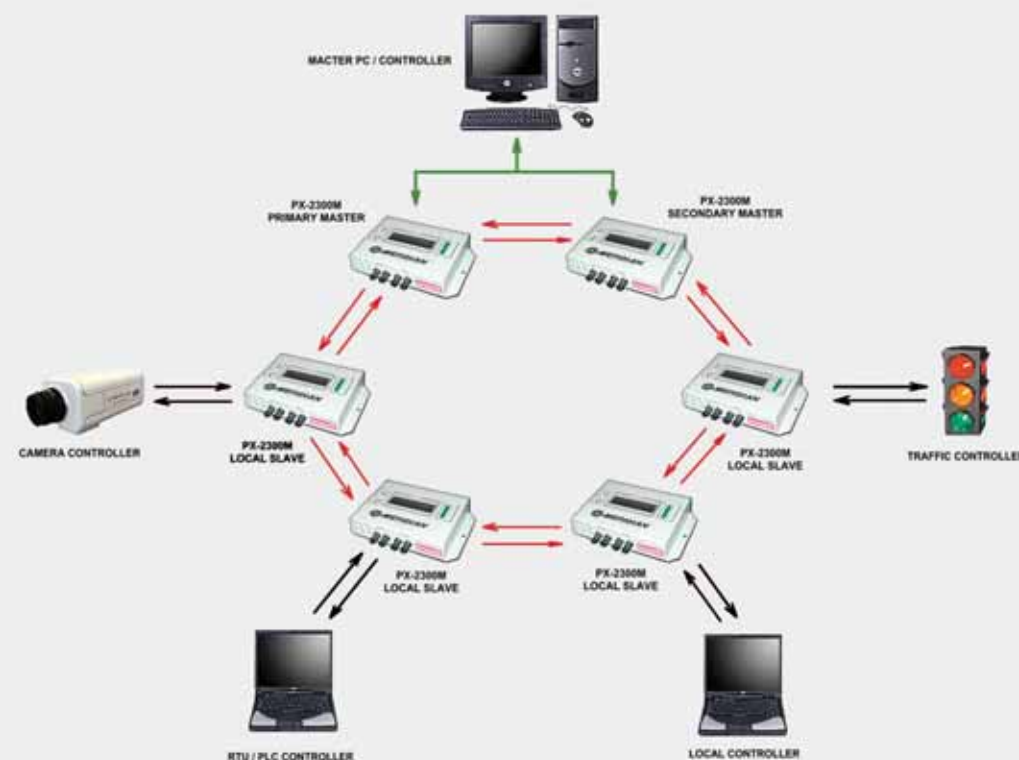
SECURITY

AIR TRAFFIC CONTROL

Meridian's SpectraSmart diagnostic management system will identify and isolate the specific fault and report both locally on each modem and back to the master controller.

Meridian Self-Healing Fiber Optic Ring Network Using the 2300M in a Dual-master RS-232 Configuration

MACTER PC / CONTROLLER

PX-2300M PRIMARY MASTER

PX-2300M SECONDARY MASTER

CAMERA CONTROLLER

PX-2300M LOCAL SLAVE

PX-2300M LOCAL SLAVE

TRAFFIC CONTROLLER

PX-2300M LOCAL SLAVE

PX-2300M LOCAL SLAVE

RTU / PLC CONTROLLER

LOCAL CONTROLLER

TRANSPORTATION

KEY FEATURES

- User configurable for easy field implementation
- RS-232D/422/485 (2 & 4 wire) and TTL compatible
- 2 or 4-fiber interface
- Built-in BET testing
- Multiple master modem capability for enhanced network reliability
- Asynchronous data rates up to 125Kbps NRZ
- True tri-state sensing (no time-outs required)
- Local and remote loop back testing capability
- Complete network diagnostics with remote access GUI interface
- Local dry contact alarm
- ESD input protection
- Fully compatible with Meridian's SpectraSmart PC diagnostics
- Exceeds NEMA TS-1/TS-2 & Caltrans specifications

APPLICATIONS

- Intelligent Transportation Systems (ITS)
- Card Access Systems
- SCADA (Supervisory Control and Data Acquisition) Systems
- Computer Networks
- Process Control Systems