The MPS1000 is a family of WAN/LAN data communications servers that are attached to a local area network to provide wide-area connectivity. A single MPS1000 communications server can support a number of WAN protocols, each of which can be accessed simultaneously by multiple clients. The MPS1000 provides two 10/100 Ethernet ports and has options for 4, 8, or 16 high-speed WAN serial ports. This makes the MPS1000 an ideal and intelligent WAN/LAN bridge, a WAN/LAN gateway device, or a remote WAN connectivity server. By using the MPS1000 as an SNMP management device, any computer and/or workstation equipped with TCP/IP on the LAN can access information from the communications server. The MPS1000 is designed to preserve the user’s software investment by enabling applications to be moved to any of Sunhillo’s WAN products. Its modular design supports virtually any serial communications protocol.

Software Support
With a well-defined application programming interface (API), Sunhillo’s integrated protocol suite reduces time-to-market by eliminating unnecessary development time at the hardware/protocol level. The protocols for the standard WAN hardware products enable development engineers to proceed directly to integration and application development efforts. Sunhillo’s comprehensive suite of WAN communications protocols provides complete WAN connectivity solutions for Radar, TADIL-B, HDLC, X.25, Frame Relay, Async, and SBSI protocols. Operating system support includes Linux®, Windows®, and Solaris™.

Hardware Features
The MPS1000 is designed as a fully programmable communications system capable of sustaining high data rates for the variety of protocols used in synchronous communications.

The MPS1000 utilizes dual Freescale MPC8255 PowerQUICC® II communications micro-processors. One of the processors is configured as the master, while the other is configured as the slave. The default mode of operation uses the slave processor with its CPU core disabled, leaving the CPM active for serial communication. The MPS1000 will automatically switch over to the secondary Ethernet PHY if a link is lost on the primary PHY.

FEATURES
• Up to 16 High-Speed WAN Ports
• Two 10/100 Base-T Ethernet Ports
• Based on Dual Freescale MPC8255 Power
• QUICC® II Processors
• 128 MB of Shared DRAM-Memory
• Multicast Support
• SNMP Support
### MPS1000: Multi-Protocol Communications Server

#### Technical Specifications

**Configuration**
- Up to 16 WAN ports – up to 2 Mbps bi-directional, simultaneously
- Two LAN ports @ 10/100 Mbps

**Processor**
- 16-Port: Two 233 MHz Freescale MPC8255 PowerQUICC® II processors
- Eight-Port: 233 MHz Freescale MPC8255 PowerQUICC II processors
- Four-Port: 233 MHz Freescale MPC8255 PowerQUICC II processors

**Memory**
- 16-Port: Two x 128 MB shared DRAM
  - Two x 32 MB application flash PROM
  - Two x 512 KB boot PROM
- Eight and Four-Port:
  - 128 MB shared DRAM
  - 32 MB application flash PROM
  - 512 KB boot PROM

**Physical Interface**
- 16-Port and 8-Port
  - WAN ports
  - (16-Port) or 2x (8-Port) 80 pin high density connectors
  - RJ45
  - LAN port
- RJ45
- Four-Port
  - WAN ports
  - 4 x DB25
  - LAN port
  - RJ45

**Electrical Interfaces**
- WAN: V.35, RS-422, and RS-232 (via external adapter on 16-Port and 8-Port)
- LAN: 10/100 Base-T Ethernet

**SNMP Support**
- SNMP (Basic MIB II) support which allows MIB browser or SNMP management of the server

**Certifications**
- FCC Class A
- CE
- UL

**MTBF**
- 16-Port: 272,253 hours per Bellcore SR-332, Issue 2
- Eight-Port: 272,453 hours per Bellcore SR-332, Issue 2
- Four-Port: 217,784 hours per Bellcore SR-332, Issue 2

**Power Requirements**
- 2 A @ 115 V
- 0.9 A @ 230 V

**Physical Dimensions**
- 432 mm (W) x 280 mm (D) x 44.5 mm (H)
  (17.0 in. x 11.02 in. x 1.75 in.)

**Weight**
- Packaged: 8.35 kg (18.4 lb)
- Unpackaged: 5.44 kg (12 lb)

**Enclosure**
- 19-in. rackmount or tabletop

**Temperature**
- Operating: 0 to 50°C (32 to 122°F)
- Storage: -40 to 70°C (-40 to 158°F)