Appendix A - Technical Specifications

Specifications apply to both OMNISCANNER and OMNIREMOTE unless otherwise noted.

Physical Characteristics

OMNISCANNER
· Dimensions: 8.75" x 4.50" x 2.12" (22.25 cm x 11.4 cm x 5.4 cm)
· Weight: 2.20 lbs (1 kg)

OMNIREMOTE
· Dimensions: 8.75" x 4.50" x 2.12" (22.25 cm x 11.4 cm x 5.4 cm)
· Weight: 1.96 lbs (0.89 kg)

OMNIFIBER
· Dimensions: 3.54" x 3.88" x 1.55" (9 cm x 9.85 cm x 3.94 cm)
· Weight: 0.24 lbs (0.11 kg)

User Interface

OMNISCANNER
· 62 x 62 mm Graphic LCD with backlight
· Backlit keypad with tactile feedback, numeric input, dedicated functions, four soft functions, and cursor pad
· Context sensitive help and operating instructions
· Tone generating audio for warning or other user feedback
· Date stamp of all tests

OMNIREMOTE LED Displays
· Pass Indicator (GREEN) for test results
· Status Indicator (GREEN) for OMNIREMOTE status, various blink rates
· Fail Indicator (RED) for test results
· Circuit Guard (ORANGE) for high voltage input protection warning
· Charge (RED) for OMNIREMOTE low battery status
· Charge (GREEN) while OMNIREMOTE battery is charging

OMNIFIBER MM LED Displays
· 850 nm Indicator (GREEN) for transmitting at 850 nm
· 1300 nm Indicator (GREEN) for transmitting at 1300 nm

· 850 nm Indicator (ORANGE) for switching fibers
· 1300 nm Indicator (ORANGE) for switching fibers

OMNIFIBER SM LED Displays
· 1310 nm Indicator (GREEN) for transmitting at 1310 nm
· 1550 nm Indicator (GREEN) for transmitting at 1550 nm
· 1310 nm Indicator (ORANGE) for switching fibers
· 1550 nm Indicator (ORANGE) for switching fibers

Power

· Removable, rechargeable battery pack
· 9.6 Volts @ 1900 mA-Hr NiMH (OMNISCANNER2)
· Built-in fast charger using AC adapter
· Charging Time: 3½ hours for fully discharged batteries.
· Battery life : 10+ hours operation (typical)
· AC: 15 VDC - 1 amp AC adapter for continuous operation or charging

Environmental

· Operating Temperature:	0°C to 50°C (32°F to 122°F)
· Storage Temperature:	-10°C to 55°C (14°F to 131°F)
· Operating Humidity:	(non-condensing): 5% to 90%
· Storage Humidity:	5% to 95%
· Regulatory Compliance:	CE Class A

Measurement Port (Test Interface)

· Ultra low Crosstalk test interface that supports testing of all four pairs
· 160 pin test interface connector which exceeds 10,000 mating cycles
· Variety of test cables and adapter modules support testing of 110 block and shielded modular jack and plug interfaces

Serial Port

· Connector:	DB-9
· Baud Rate:	300 to 57,600 baud
· Parity:	None
· Length:	8 Bits
· Handshaking:	None, RTS/CTS, and XON/XOFF

Universal Serial Bus

· Type Self Powered Device
· Link 12 MB/s Full Speed Bulk Transfer with two 128 byte FIFOs and Automatic Retry
· Connector Type 'B' Receptacle

· Recommended Cable Full Speed Shielded Twisted Pair with A-B Plugs (USB V1.1 Complaint)

MultiMediaCard Interface

· Link 4.6 MB/s SPI Mode with 16 bit CRC
· Format 512 byte sector size, 32Bit FAT File System
· Socket Non-Locking Seven Contact with Ejector
· Recommended Media Sandisk SDMB-xx or Infineon MultiMediaCard-F00xx (xx denotes memory size in Megabytes)

Memory

· Control: Flash Memory allows electronic upgrading of both OMNISCANNER and OMNIREMOTE programs.
· Test Storage: Up to 1000 complete Autotest results can be stored in permanent flash memory. They are not subject to loss due to power or battery failures.

OMNISCANNER Autotest Functions

· Full suite of tests to determine if cable meets generic cabling or network type requirements.
- Extended performance range Cabling (CAT 6 and CAT 7)
- **TIA** standard Autotests
- **ISO/IEC** standard Autotests
- **Vendor** specific Autotests
- **IEEE** standard Autotests
- **ATM** standard Autotests
- **FDDI** standard Autotests
- **AS/NZ** standard Autotests
- **ANSI** standard Autotests

OMNISCANNER Test Functions

· Wire Map
· NEXT (Near End Crosstalk)
· Return Loss
· Attenuation
· ELFEXT (Equal Level FEXT)
· ACR (Attenuation to Crosstalk Ratio)
· Bandwidth
· Length/Delay
· Resistance
· Power Sum NEXT, ACR and ELFEXT

· **Coax Tests:** Length, Delay, Impedance, Resistance