CableFree
Wireless Excellence

Free Space Optics (FSO)
CableFree FSO Manager Software
Overview

About Wireless Excellence

Founded in 1996 and with headquarters in Oxford UK, Wireless Excellence Limited is a leading designer and supplier of outdoor and indoor Broadband Wireless communication products.

With a complete range of solutions including Radio, Microwave, Millimeter-Wave, Free Space Optics, WiFi and 4G/LTE solutions, customers in over 80 countries have chosen Wireless Excellence as the "one stop shop" solution of choice for dependable wireless networking.

About FSO

CableFree FSO Technology uses directional beams of Infrared light for communication and does not require RF spectrum to operate. Capacity up to 1.5 Gbps and distances of up to 4km are possible depending on region. CableFree FSO links have been deployed in many countries including major telecom and corporate networks, and have many advanced features which increase flexibility, reliability, performance, management capability and total-cost-of-ownership.

Product Features

- Direct management of both ends of an operational link
- Easy-to-use Windows™ Management Interface
- Print-out and storage of operational status report, used for link commissioning
- User-programmable major and minor Alarm conditions
- View Serial numbers and Unit identifiers for asset management
- Interface hooks to *Cluster Manager™*

Connections

Connection from the Management workstation to the FSO unit can be any of:

- Direct connection via RS232 connection either to PSU or optional SmartAgent.
- Dial-up access over land-line or GSM modem
- Ethernet connection to SmartAgent using proprietary format UDP protocols
- Ethernet connection to SNMP Proxy Agent using standards-based SNMP protocols

Product Variants & Specs

System Tabs

Link Status

- RSSI Local and Remote - Numeric & Bar graphs
- Availability % Local and Remote - Numeric
- Unit Temperature Local and Remote - Numeric
- Alarms - Red for current, Amber for flagged
- Connection interface - box indicates whether RS232, dial-up, UDP or SNMP is specified and whether the connection is active, inactive or failed. Failed indicates that 3 repeated attempts to poll were unsuccessful.
- Last Power up Time & Date, Local and Remote
- Firmware & Protocol Versions, Local and Remote
- Serial Number & Link Identifier, Local and Remote
- Link Operating mode (data or voice)
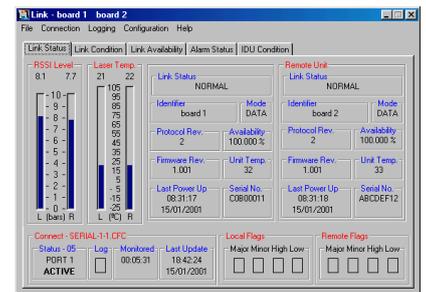
IDU Condition

- IDU Serial Number Local and Remote
- SIMM Serial Number Local and Remote
- IDU Power Voltage Local and Remote
- SIMM IP addresses Local and Remote
- IDU Last Power-up time Local and Remote
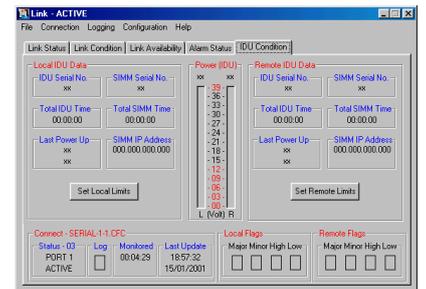
Alarm thresholds

- Show threshold values of all just as above
- Set button(s) to program thresholds

Alarm Status

All of these should register 'current' or 'flagged' status
- Link Status (working, one-way, dead or reflection)
- Low RSSI
- Low Voltage
- Laser Life
- Loss of Data
Reset button for Alarms (initially, only offer this on RS232 or dial-up connection)

Link Availability

- Last Power up Time Local and Remote
- Total Operating Time Local and Remote
- Monitored Time Local and Remote (with button to reset)
- Unavailable Seconds Local and Remote (resets with monitored time)
- Availability % Local and Remote numeric readout
- Errored Seconds Local and Remote (resets with monitored time)
- Bit Error Rate Local and Remote (resets with monitored time)
- Last Valid Data Time& Date, Local and Remote
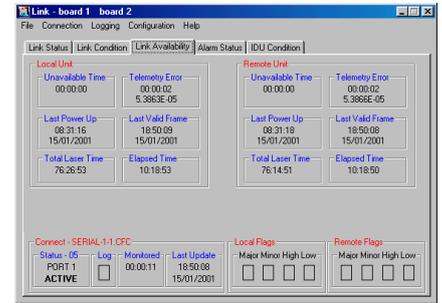
Link Condition

- Unit Temperature Local and Remote - Bar graphs and numeric readout
- Laser Temperature Local and Remote - Bar graphs and numeric readout
- DC Head Power Local and Remote - Bar graphs and numeric readout
- DC IDU Power Local and Remote - Bar graphs and numeric readout (optional, detect)
- Laser Condition Local and Remote - Numeric
- TX Power in dBm Local and Remote – Numeric
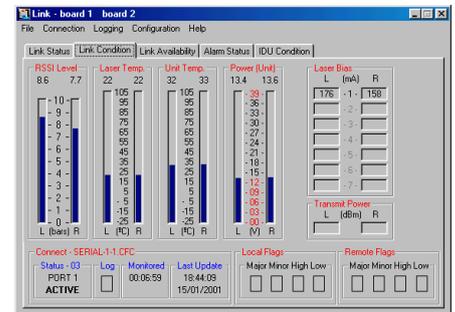
Accessories

Mounting Brackets	Wall, Roof, Pole, Tower or Tripod mount options available
Indoor unit	Indoor network termination and SNMP V2 management interface
Alignment kit	Display of Local & Remote signal levels
Management Suite	Full range of solutions including LinkManager™, AlarmView™, ClusterManager™, GSM modem

Overall software Specifications

RS232	Local user interface
10BaseT Ethernet	LAN/WAN connection
Dry Contact alarms	8 or 16 inputs (optional)
Protocols	UDP, Proprietary

Management Connections

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Dry Contact alarms	8 or 16 inputs (optional)
Protocols	UDP, Proprietary

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