

Interfaces

General

- Binary Rate: 155 kbit/s \pm 20 ppm

Electrical Interfaces

- Number of inputs: 4
- Connector: coaxial BNC
- Impedance: 75 Ohms
- Interface G.703/G.772
- Line Code: CMI
- Resistive Gain: -20 dB flat attenuation
- Automatic Equalization: 0 to 12 dB

Optical Interfaces

- Number of inputs: 2
- Connector: FC/PC
- Interface according G.957 L1.1 and L1.3

Operating Modes

- In-service measurements (ISM) over framed signal
- Out-of-service measurements (OOS) over a framed/unframed signal carrying a PRBS $2^{23}-1/2^{15}-1$ according O.151 or user defined word

Detected Events

Alarms

- Regeneration Section: LOS (loss of signal), LOF (loss of frame), RS-TIM (trace identifier mismatch)
- Multiplex Section: MS-AIS (alarm indication signal), MS-RDI (remote defect indication)
- High Order Path: AU-LOP (loss of pointer), AU-AIS, HP-RDI, HP-TIM

Errors

- Regeneration Section: B1 errors, OOF
- Multiplex Section: B2 errors, MS-REI (remote error indication)
- High Order Path: B3 errors, HP-REI

OOS Events

- Unframed PRBS or PRBS carried by a C-4 in line with O.181: LSS, TSE (PRBS bit errored)

Performance Analysis

- Performance analysis according G.826
- Parameters: ES, SES, US & BBE

Objectives

- Programming objectives: ES, SES, US & BBE
- Separate objectives for analysis intervals of 15' and 24 hours

Results

Event detection & performance analysis simultaneously in all inputs.

Event Counts

- Errors: number, seconds with, rate
- Alarms: seconds with
- Performance parameters: number and rate

LED Indicators

- Indication of each event by an associated softLED
- Status: Green=OK; Yellow=error; Red=alarm

Event Trace

- Each event at each monitoring point is traced
- User programmable filter: selection of monitoring points & events of interest
- Each trace associated to an event can be displayed as a time-plot or as a histogram
- Resolution: second, minute, hour, day
- Trace duration: up to 3 months

Performance Results

- Counters: number and rate (%)
- Indication by means of LEDs if short-term performance objectives are met (analysis in intervals of 15'). Green=OK; Red=BAD.

Performance Trace

- Trace for each parameter and monitoring point
- User programmable filter: selection of monitoring points & parameters of interest
- Trace resolution: 15' & 24h according to M.2120
- Histogram associated to each parameter indicates if objectives are met (Pass/Fail).

Ordering Codes

M155e	Monitoring Card 4 x 155 Mbit/s electrical interfaces
M155eM	Monitoring Card 4 x 155 Mbit/s electrical interfaces. Master type
M155o	Monitoring Card 2 x 155 Mbit/s optical interfaces
M155oM	Monitoring Card 2 x 155 Mbit/s optical interfaces. Master type

A Measurement Unit (MU) must always hold one and only one Master type Card.



TrendCommunications

International: +44 (0) 1628 524977

Deutschland: 089 32 30 09 11

France: 01 69 35 54 70

India: 22 8597 463/4

Spain: 93 300 33 13

United Kingdom: 01628 524977

US: 256 461 0790

Email: www.trendcomms.com

Web: infoline@trendcomms.com

A member of the Telemetrix plc Group

Distributor

Trend Communications Ltd

Knaves Beech Estate
Loudwater, High Wycombe
Buckinghamshire HP10 9QZ UK

Trend Communications SL

Pujades, 60
08005 Barcelona
Spain