CATV Forward Path Management Simplified

The CX180F is a rackmount monitoring system to check the performance of analog and digital channels being transmitted downstream or toward customers across a CATV HFC network. Equipped with three test ports, key signal parameters including level, BER, MER, and Constellation are scanned continuously and non-intrusively. Advanced spectrum analysis across the entire operating frequency band, detects ingress which can lead to signal impairment and/or failure. The ReVeal CX180F controller/server package which forms an integral part of the system, continuously checks for signal values that exceed user defined thresholds.

Product Highlights

- One 1U 19” Rackmount unit
- Three flexible system configurations:
  - CX180F: 3 independent monitoring ports
  - CX180F-1: 1 monitoring port
  - CX180F-10: Cost-effective 10 port switching monitoring system with built-in 10:1 matrix
- Monitors analog, digital TV channels and FM carriers
- Fast continuous scan of all active channel
- On-demand channel camp-on for long term analysis
- Detailed digital channel QAM 64/256 analysis with constellation
- On-demand ingress noise scan from 5 to 1000MHz
- Ethernet system interface to CX180F Server/Controllers
- Secured access to prevent unwanted intrusion
- Cost-effective solution for small headend deployment, yet easy for future expansion
Specifications

Interface

RF Input
Connector: F type, female 75Ω
Frequency range: 5 to 1000MHz

Control Ports
Serial port: RS232, DB-9, Female
Ethernet: 10/100-T, RJ45

Measurement
Frequency range: 5 to 1000 MHz
Level range:
- -40dBmV to +55dBmV
- 20dBuV to +115dBuV
Level accuracy: ± 2dB typical
Amplitude resolution 0.1dB
QAM modulation: 64/256 QAM Annex A/B
Digital channel lock range
- -15dBmV to +50dBmV or
- 45dBuV to +110dBuV
MER range: 21 to > 40 dB, ± 2dB typical
Pre and Post BER range: 1.0 x 10^{-9} to 9.0 x 10^{-3}
Input impedance: 75Ω

Measured Parameters
System Scan – Analog
- Video and Audio channel power level, V/A ratio, peak-to-valley, min/max audio and video level, tilt
System Scan – Digital
- QAM level, min/max QAM level, tilt, Peak-to-valley
System – FM channel
- Channel power level
On demand single channel – Analog
- Video/Audio power level, V/A ratio, adjacent channel, C/N ratio
On demand single channel – Digital
- QAM power level, MER, Pre/Post BER, Constellation,Adjacent channel
On demand FM
- Power level

General Specifications
Size
320 x 300 x 38 mm (W x D x H)
12.59 x 11.81 x 1.49 in
Weight
Less than 3 kg (less than 6.6 lb)
AC Adaptor
Input: 100-240 VAC, 50-60 Hz
Output: 15VDC, 3.5A
Operating Temperature
-10°C to 50°C (14°F to 122°F)
Storage Temperature
-20°C to 70°C (-4°F to 158°F)
Humidity
5% to 95% non-condensing

Ordering Information
Z02-00-006P CX180F Forward Path Analyzer
499-05-103 CX180F - Server Software
499-05-104 CX180F - Master Software
499-05-107 One year maintenance for CX180F - Master software

Test Options
A01-00-002G AC Adaptor (3-prong)
F04-00-004G Power Cord - US 2 m (6 ft)
F04-00-005G Power Cord - EU 2 m (6 ft)
F04-00-006G Power Cord - UK 2 m (6 ft)

Replacement Items

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