



## CX180F

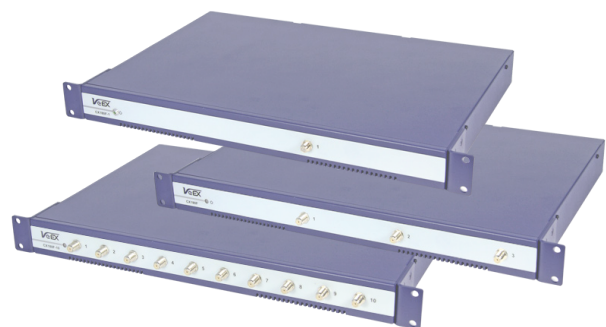
### Forward Path Monitoring System

#### 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





CX180F



CX180F-1



CX180F-10

## 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:  $1.0 \times 10^{-9}$  to  $9.0 \times 10^{-3}$

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

### Test Options

499-05-103 CX180F - Server Software  
499-05-104 CX180F - Master Software

### Annual Maintenance Contract

(after the first year; server provided by customer)

499-05-107 One year maintenance for CX180F - Master software

### Replacement Items

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)



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