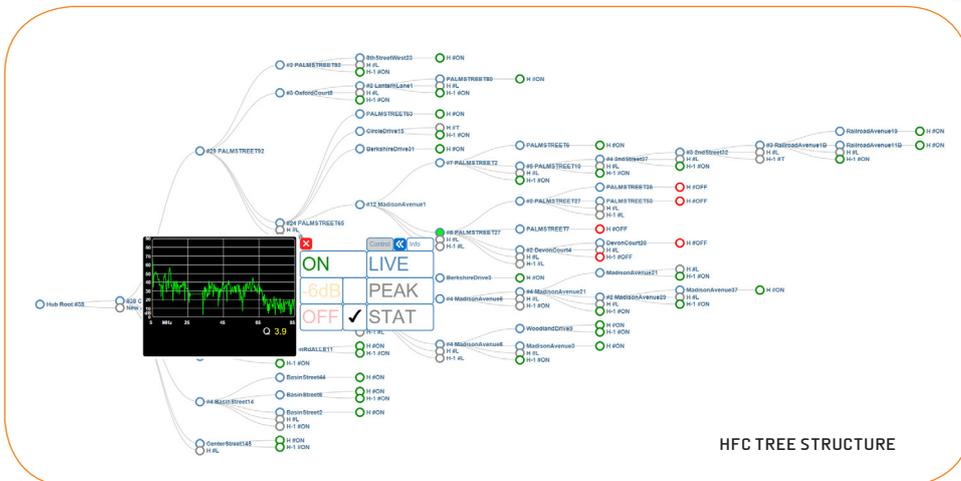


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# X16

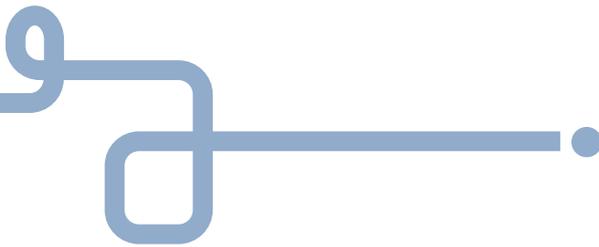
## X16 HFC ANALYZER



## FEATURES

- \* Returnpath spectrum analyzer
- \* Up and downstream sweep system
- \* Downstream carrier monitoring up to 1218 MHz
- \* History logging of returnpaths
- \* DOCSIS burst detection with zero-span mode
- \* 16 input RF switch
- \* Access with smart phones and tablets
- \* Low power: less than 25 W
- \* Works with P4i handheld field unit

# SWEEP SYSTEM X16 AND P4i



## X16

### X16 HFC ANALYZER

The Kronback Tracers X16 is a DOCSIS 3.1 compatible suite of HFC monitoring tools such as returnpath analyzer, sweep system, downstream carrier monitor. Returnpath monitoring includes an advanced quality engine to log history information of noise and quality and alerts if ingress is present. Features such as NMS gateway and a dedicated RF switch increases the flexibility. A full featured interactive tree-structure of the HFC plant, integrated with major GIS providers, ensures that users can locate noise source in an effective and proactive way. The analyzing of amplifiers actions by the X16's advanced quality engine presented to the user immediately.

#### RETURNPATH SPECTRUM ANALYZER

The Kronback Tracers X16 returnpath analyzer provides real-time and history spectrum analysis. The returnpath range is 3-204 MHz. Groups of X16 units can monitor an unlimited number of returnpath within each headend. The X16 is accessed via all major web browsers and can also be controlled from smartphones and tablets. Multiple concurrent users can access individual returnpath signals simultaneously while history logging of all returnpath is performed.

#### RETURNPATH QUALITY

The quality of all returnpath inputs is evaluated online and ranged from 1 to 5. This ensures that users have a fast and tangible overview of the overall network performance.

#### SWEEP SYSTEM

The X16 features a powerful up- and downstream sweep system supporting the full returnpath range of 3-204 MHz and downstream from 50 up to 1218 MHz. Together with the compact and flexible P4i field unit a full and precise network alignment can be performed effectively.

#### CARRIER DETECTION

Carrier monitoring of all downstream carriers can be performed in the range from 50 to 1218 MHz. Individual channel plans can be programmed for each input. Precise readout of analog and digital carriers are presented online and as history information. Alarms can be dispatched based on programmable thresholds.

#### FULL RANGE RF SWITCH

The 16 inputs of each X16 can be switched to a dedicated output. The switch features a high linearity high isolation single-pole-16-throw switch. The switch and combiner can be used as preselection switching for 3rd party measurement equipment in the headend.

### SPECIFICATIONS

#### INPUT 1-16

- Connector: F-type 75 Ohm, AC coupled.
- 100V DC isolation
- Frequency response: 3-1218 MHz
- Return loss return path: >18 dB
- Return loss downstream: 18 dB@40 MHz, -1.5 dB/oct
- Isolation: >60 dB

#### OUTPUTS - GENERATOR AND SWITCH

- Frequency range: 3-1218 MHz
- Frequency steps: 10 kHz
- Frequency error: <5 kHz
- Level range: 30 dBuV - 100 dBuV
- Level steps: 1 dB
- Level error: <0.5 dB
- Return loss: >18 dB

#### CONNECTORS

- F-type 75 Ohm, AC coupled

#### INDICATORS

- 16 LEDs indicating analyzer status
- 16 LEDs indicating LCD status
- 16 LEDs indicating switch position
- 2 LEDs indicating RF output activity
- 2 LEDs indicating power and network status

#### PHYSICAL SPECIFICATIONS

- Height 43.8 mm (1 unit)
- Width 482 mm (standard 19" dimensions)
- Depth 225 mm
- Weight 2.7 kg

#### ELECTRICAL

- 48V DC Connector Reverse polarity protection
- Power consumption <25 Watt

#### ENVIRONMENTAL

- Operating Temperature: 5°C ~ 45°C
- Storage Temperature: -20°C ~ 55°C
- Operating Humidity: 10% ~ 90%, non-condensing
- Fanless device

#### NETWORK

- Fast Ethernet, control and management
- IEEE 802.3 10Base-T Ethernet
- IEEE 802.3u 100Base-Tx Ethernet
- Fixed IP address and DHCP support
- Giga Bit Ethernet, RTP streaming
- IEEE 802.3ab 1000BASE-TX

#### MANAGEMENT

- Remote
- Web
- SNMP
- SYSLOG
- USB
- TELNET
- FTP
- Local control
- Joystick

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We encourage you to contact our sales organization to test our products on your premises.

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<https://www.go2mhz.com/product/hfc-analyzer/>

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