



CX20

Handheld Leakage Detector

Leakage Detection Simplified

The CX20 Leakage Detector verifies leakage levels in HFC networks so technicians can reduce a cable system's Cumulative Leakage Index (CLI).

Product Highlights

- Robust, handheld construction for demanding field test applications and conditions
- Designed for technicians troubleshooting and identifying leakage at subscriber premises
- Compatible with all VeEX V100+ products (CX series)
- USB power supplied by USB port on companion test set
- Measurement results displayed and stored on companion test set
- Leakage measurements can be exported via USB memory stick, FTP upload (LAN, DOCSIS, or 3G/UMTS) or using ReVeal CX software
- Weighs less than 500 grams
- ROHS compliant

Key Features

- FCC and EU leakage conformance
- High performance, frequency agile detection
- Preset 10 carrier frequencies in non-volatile memory
- High band: 120 to 155 MHz with 500 Hz resolution
- Low band: 109 to 110 MHz with 500 Hz resolution
- Digital Tags and detection
- Calibrated Level Range: 10 to 5000 $\mu\text{V/m}$
- Carrier Level measurement (peak and average)
- 1st Harmonic level measurement (PAL or NTSC)
- Leakage detected within sensitivity range displayed on companion VeEX CX series test set
- Advanced signal design processing discriminates between leaks and noise
- Automatic Composite Triple Beat (CTB) gain correction
- Peak hold measurement to capture maximum levels

Applications

A basic CATV rule of thumb states that before finding and removing ingress sources, it is necessary to locate and remove all leakage sources. Leakage can interfere with aircraft communications and navigation, thus Federal and Government Authorities globally have prescribed limits that CATV operators should conform to. Pro-active steps should regularly be taken to reduce Cumulative Leakage Index (CLI), because cumulative leaks form an invisible cloud of unwanted RF energy over the cable system. In general, all leaks greater than 20µV/m should be logged and fixed, while leaks above 50µV/m should be used in CLI calculations. Furthermore leaks are a contributing source of ingress that can impair inter-active DOCSIS communications, so installers should never underestimate the importance of this measurement.

The CX20 is an affordable accessory and leakage solution for field technicians already equipped with a CX series CATV tester. The unit features a calibrated antenna and sensitive leakage receiver with sophisticated signal processing to discriminate between leaks and noise. A USB communication connection to the CX tester displays the measurement results and also provides power to the leakage detector. Test results can be saved and exported via ReVeal software or uploaded automatically via DOCSIS or 3G/UMTS RF connection.



Specifications

- Compatible with all VeEX V100+ CATV products (CX series)
- Communication Interface: USB 2.0
- Powered by USB port from a companion CX test set & USB cable
- Conformance: Ensure leakage levels comply with FCC (Part 76.611), European Union (EN 50083-8) standards or EU 89/336/EEC Directives.
- Test Results displayed and stored on companion VeEX test set
- RF input: 50ohm Antenna equipped with TNC-M connector
- Carrier level measurement
 - Detection range: 10 to 5 000 uV/m
 - Sensitivity: 2 uV/m
 - Accuracy: ± 1 dB
 - Carrier level evaluation performed in a 8 kHz bandwidth
 - 1st harmonic level evaluation performed in a 8 kHz bandwidth
- Frequency operation
 - 120-155 MHz (High Band)
 - 109-110 MHz (Low Band)
 - Resolution: 500 Hz
- Digital tag detection capability
 - AM or FM modulation software detection
 - 3-20 Hz AM or FM modulation frequencies
 - 115-210 Hz AMHF modulation frequencies
 - Detection can be enabled or disabled

General Specifications

Size	182 x 74 x 36 mm (H x W x D) 7.17 x 2.91 x 1.42 in
Weight	Less than 500 g (less than 1.1 lb)
Operating Temperature	-10°C to 60°C (14°F to 140°F)
Storage Temperature	-20°C to 70°C (-4°F to 158°F)
Humidity	5% to 95% non-condensing
Ruggedness	Survive 2 m (6 ft) drop to concrete on all sides
Water Resistance	May be used in heavy rain

Ordering Information

Z02-00-017P	CX20 Leakage Detector Includes: User's manual, USB to USB adapter cable
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