

KRIO II – ETR 290™ QAM

Affordable yet comprehensive device for remote 24/7 full ETR 290 monitoring and error logging of QAM channels. Decodes and monitors RF parameters and ETR 290 compatibility and errors in MPEG transport streams (PAT, PMT, NIT, SDT, CAT, TDT, and TOT). With its powerful carrier search engine, it is able to find and analyze all available RF channels. Detects missing audio or video streams. Measures and reports via email the essential parameters of both RF and digital signals at an exceptional price/quality ratio. RF coax input.



Features

- Remote 24/7 analysis and monitoring of QAM broadcasts
- MPEG PSIP table Monitoring – SDT, NIT, PMT, TOT, TDT, CAT
- PID Alarms – monitoring digital audio and video channels for all available RF channels
- Comprehensive transport analysis, including ETR 101 290 priority level 1, 2 and 3 errors
- Scans and reports on complete band of QAM
- Programmable sampling rate
- Embedded web server for easy configuration and control
- E-mail notifications and alarms for timely support
- SNMP, Alarms and Log
- Measures MER, BER, VBER, CBER, C/N, SNR, level
- Easy to set up and configure. No NMS software required. Just enter the web site of the device.
- Logs alarm messages with accurate time for all available RF channels
- SNMP configuration and control for large CATV broadcast networks
- Future proof – supports remote firmware upgrades
- Supports ITU-J83 annex B
- Extremely competitive price

Applications

- Monitor QAM headends for corrupted signals or carrier loss
- Monitor remote points of CATV networks
- Monitor QAM broadcasts in remote areas
- Comply with legal requirements for monitoring broadcast channels

Overview

Inexpensive RF monitoring tools can lead to ever greater quality and reliability of signals emanating from cable head ends. The KRIO II – ETR 290 QAM is designed to provide you with a comprehensive RF based QAM analysis tool. Through its powerful search engine, the KRIO is able to monitor all available channels.

The KRIO II – ETR 290 QAM is specially built for CATV networks and QAM broadcasters that want to provide their clients with quality service round the clock. This can only be achieved with constant monitoring of critical parameters.

Through RF inputs, the unit sequentially monitors a set list of channels and continuously ensures that your network meets both legal requirements and your operating goals.

With its IP based management interface, the KRIO II – ETR 290 QAM can be controlled remotely using the user-friendly embedded web site or an SNMP-Based network management system. The system offers innovative functions such as multi-channel monitoring (up to 240 channels per receiver), automatic scanning, and remote control.

The KRIO II – ETR 290 QAM can scan the QAM signal for one or two minutes. The measured results are represented in charts on the embedded web server. Without any special software, just enter the IP address of the device in your web browser and it will display all subchannels in your cable network.



Computer Modules, Inc.

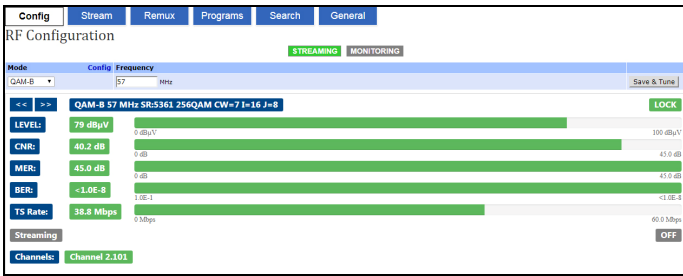
11409 West Bernardo Court

San Diego, CA 92127

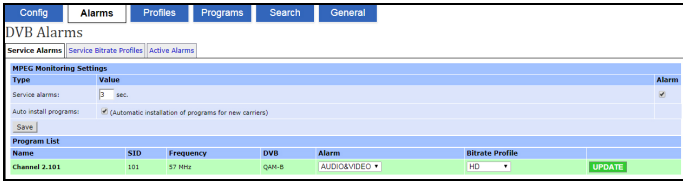
Tel: 858-613-1818 Fax: 858-613-1815

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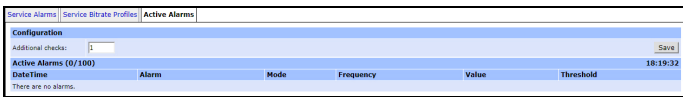
Sample of GUIs



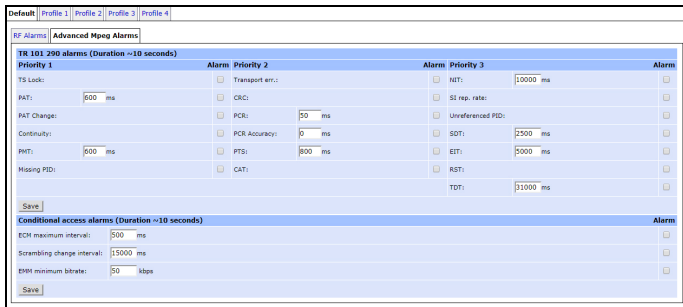
RF Configuration



Service Alarms



Active Alarms



TR 101 290 Alarms

Inputs/Outputs



Specifications

Communication Ports

Ethernet:	100Base-T – Web Server and UDP/TCP (SNMP/ASCII)
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Frequency Range and Modulation

Frequency range:	46 MHz - 1004 MHz
Digital RF:	ITU-T Recommendation J.83 Annex B (Clear QAM)

Demodulator

QAM:	ITU-T Recommendation J.83 Annex B (Clear QAM)
Supports:	128/256 QAM
Bandwidth:	6 MHz
Symbols rate:	1MS/S-7MS/S

Digital Measurements

Standard:	ETSI TR 101 290 V1.2.1
Level (Voltage Level):	30dBuV - 100dBuV (±2dBuV)
MER:	19dB - 45dB (±2dB)
C/N:	19dB - 45dB (±2dB)
SNR:	19dB - 55dB (±2dB)
BER (for DVB-C):	1E-1~ 1E-7

MPEG Decoding

PSI Tables:	PAT, PMT, SDT, TDT, TOT
Alarms:	Service Audio/Video alarms with e-mail notifications and SNMP traps

TR 101 290 Alarms

Priority 1 Alarms:	TS Lock, PAT Interval, Continuity, PMT Interval, Missing PID
Priority 2 Alarms:	Transport error indicator, CRC, PCR Interval, PTS Interval, CAT
Priority 3 Alarms:	NIT Interval, SI repetition rate, Unreferenced PID, SDT Interval, EIT Interval, RST, TDT Interval
CA Alarms:	ECM Maximum Interval, Scrambling change interval, EMM minimum bitrate

SFN Measurements & Alarms

SFN Impulse response:	Accuracy ±3µs
SFN Impulse response Drift:	Accuracy ±3µs
GPS Lock:	Alarm
MIP packet:	Alarm

Monitoring

Alarms:	Carrier count, Level (low, high), SNR (low), C/N (low), MER (low), BER (high), CBER (high), VBER (high), PAT/PMT/Audio/Video missing alarm
Log, E-mail, SNMP traps:	Available

Info

Updates:	Available
Front Panel LEDs:	Power supply, LAN, Alarm

Physical & Power

Voltage:	115V, 230V
Voltage Tolerance:	+/- 10%
Main AC Frequency:	45-65 Hz
Fuse:	0.8A
Consumption:	10 VA
Dimensions – (W x D x H):	19 x 8.66 x 1.75 inches (483 x 220 x 44.5 mm)
Weight:	5.5 lbs. (2.5 Kg)

Ordering Information

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