

Cricket® QAM Plus

QAM RF and MPEG Video Monitoring, Analysis, and Troubleshooting Tool

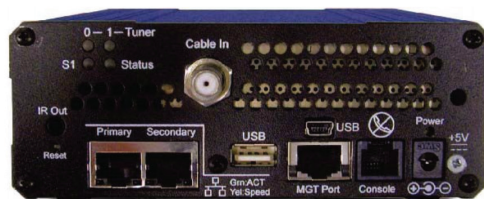
Cricket® QAM Plus is a powerful QAM video quality and service assurance troubleshooting tool for Cable System operators that need to monitor, analyze, debug, and resolve video quality issues at the network edge. It is designed for use in remote monitoring and troubleshooting applications of the QAM at the hub sites, along the last mile, or at the subscriber premises. Cricket QAM Plus is perfect for monitoring each service group within an RF network. The Cricket QAM Plus offers two tuners, providing more monitoring coverage and continuous scanning of the QAM channels quickly alerting operators to RF outages and video issues.

Integration into iQ video management system, iVMS®, correlates information from all iQ probes including Cricket QAM Plus, and notifies the network operations center (NOC) of any problems. Automated alerts to a specific video issue allow the operator to be proactive in correcting the situation.

Cricket QAM Plus is not only a video MPEG monitoring probe, but it can be utilized as an inexpensive, portable QAM RF Analyzer providing constellation diagrams, MER, BER, Reed-Solomon metrics, and power levels. Cricket QAM Plus is a versatile tool providing service group monitoring and analysis for MPEG video quality issues and RF signal integrity.

Key Features

- Remote monitoring of up to two QAM RF channels / MPEG transport streams simultaneously
- Modulation support:
 - Annex A, B & C versions available
 - QAM 64 and 256
 - Upstream channel duplexer
- RF Measurements and Analysis
 - Tuner signal loss
 - Carrier level
 - MER and EVM
 - Pre FEC BER and RS correctable count
 - Post RS uncorrectable count
 - Constellation diagrams
 - Carrier offset (in Hz)
 - Symbol rate offset (in ppm)
- MPEG Measurements and Analysis
 - Supports SD and HD MPEG over SPTS and MPTS
 - MPEG monitoring and analysis to the PID level
 - Flexible alarm template configuration
 - Error detection according to TR 101 290
 - Transport stream and program metrics including CC loss, PID bitrates, Outages, and more
 - 80 MB triggered TS capture buffer
- RF tuner
 - Supports frequencies up to 1 GHz
 - Up to two tuners on a single F connector
 - Dual SAW filters
 - Solid state tuner (no air coils)
 - Configurable Frequency scanning



Cricket QAM Plus offers an 1 GHz RF interface with a Dual Tuner, 10/100Mb Ethernet ports and plug & play USB for connection to any PC.

Specifications

Physical	
Description	Specification
Cricket QAM Plus Dimensions	Width: 5.3" (134.6mm) Height: 2.12" (53.9mm) Depth: 7" (178mm)
Power Supply Dimensions	Width: 1.96" (50mm) Height: 1.23" (31.2mm) Depth: 4.33" (110mm)
Weight	0.77 kg (1.70 lbs) 1.29 kg (2.85 lbs) - with external power supply and power cord

Environmental	
Description	Specification
Operating Temperature	0 to 40°C
Storage Temperature	-20 to 60°C
Environment	Indoor use only in a non-explosive atmosphere. Pollution degree 2
Operating Altitude	2000m maximum
Operating Humidity	80% maximum for temperatures up to 31°C, decreasing linearly to 50% relative humidity at 40°C

Power Consumption	
Description	Specification
Cricket QAM Plus, North America / 3CA- 00001QP-001	Cricket QAM Plus alone is 16 watts = 54.6 Btu/h Cricket QAM Plus with PS is 22.9 watts = 78.0 Btu/h
Cricket QAM Plus, North America / 4CA- 00011QP-001	Cricket QAM Plus, NA alone is 18 watts = 61.42 Btu/h Cricket QAM Plus, NA with PS is 25.7 watts = 87.74 Btu/h

Reference Clock and Calibration	
Description	Specification
Internal Reference Clock	100MHz +/- 50ppm accuracy
Calibration	The Cricket requires no periodic calibration adjustments during its lifetime.

Power and Cooling	
Description	Specification
Power Requirements - External Power Supply	Mains Supply: 100 to 240VAC, 0.6A, 50 to 60Hz, voltage fluctuations up to +/- 10% of the nominal voltage. The power supply contains no user serviceable parts and must not be disassembled.
Power Requirements – Cricket QAM Plus, North America / 3CA-00001QP-001	5 volts DC, 3.7A via external power adapter or Rack Mount Kit
Power Requirements – Cricket QAM Plus, North America / 4CA-00011QP-001	5 volts DC, 3.9A via external power adapter or Rack Mount Kit
Cooling	The Cricket QAM Plus is cooled by forced convection via an internal fan. Allow airflow through the front and rear panels. We recommend at least 2" space at front and rear panels. Cool air to enter connector side and heated exhaust air will exit from IQ logo end of enclosure. Do not cover or stack units. The power supply is cooled by natural convection.