

DESCRIPTION

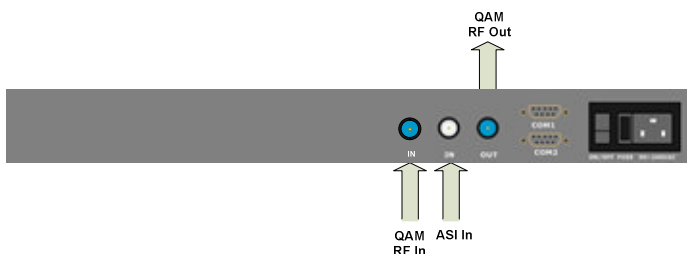
Radiant's Eclipse Series leverages advanced engineering and intelligent, user-friendly design to rapidly and cost-effectively deploy all-digital lineups to low-cost digital set-tops. Affordable for systems of all sizes, the Eclipse Series is ideal for MDUs, hotels, hospitals, gated communities, casinos, and retirement centers.

QRF-5005DQ Digital Processor - a plug-and-play device that can input a QAM signal and move it to a different channel on the output for distribution into existing cable network. In addition the QRF-5005DQ has capability of program filtering that allows the operator to select which of the MPEG programs present on the input stream to be included in the output. The input transport stream can be multiplexed with the transport stream supplied to the ASI Input.

With digital services increasingly being used to deliver video to the home, operators are focused on enhancing the subscriber's viewing experience by increasing the variety of services they offer and improving quality, while still maintaining a cost-efficient and easy-to-manage infrastructure.

Radiant's QRF5000 Series are an embedded, hardware-based solution compliant with all relevant industry standards. It was built with the operator in mind—a simple to use front panel provides complete control over the platform, while an IP interface allows for an external modem to provide remote functionality. The feature-rich platform consumes little power and generates less noise. In addition, it is designed to be placed anywhere in the building, from the basement to the lobby.

With its standard 64 or 256 QAM output and ASI interfaces, the QRF5000 Series are capable of integrating in any existing headend or residential environment.



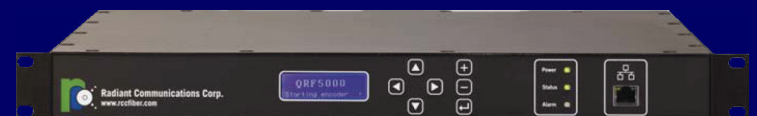
QRF5005DQ Digital QAM Processor

BENEFITS

- Cost effective, integrated, single box solution
- Flexible channel selection capability
- Moves system toward all digital solution
- 64 QAM and 256 QAM Selectable Output
- High RF Output, +62dBmV

FEATURES

- Low power consumption
- MPEG Program Filtering
- Transport Stream Multiplexing
- QAM Digital Signal Processing
- Agile QAM Modulator and Upconverter



**Radiant
Communications
Corporation**

Phone: 908 757 7444 or
800 969 3427
Fax: 908 757 8666
E-mail: sales@rccfiber.com

P.O. Box 867
South Plainfield
NJ 07080
USA

3/2008

SPECIFICATIONS

ASI Input

Connectors BNC
 Video 1 volt peak -peak nominal
 AGC Range -6 db minimum to +3db maximum
 Input Impedance 75 Ohm

RF Input

Connector F-Type
 Impedance 75 Ohms
 Return Loss 12 dB
 Frequency Range 57MHz—861MHz
 Frequency Step Size 62.5 KHz
 ITU Mode Annex B 64 QAM, 256 QAM
 Input Power Range 64 QAM -17dBmV—+23dBmV
 256 QAM -12dBmV—+18dBmV
 Oscillator Leakage < 26dBuV typical
 Min required CNR 64 QAM 25.5dB
 256 QAM 32.5dB

Output

QAM 64 or 256 per ITU-J.83 Annex A,B and C downstream standards
 RF Output One contiguous QAM modulated RF channel on 1 RF port
 RF Output Level 44 - 62 dBmV Front Panel Controlled
 RF Output Adjustment Step Size 0.5 dBmV
 RF Output Accuracy +/- 2 dB +/- 5000 Hz
 RF Output Stability +/-1 dB relative to RF Output level
 RF Output Return Loss >14 dB 177 - 750 MHz; >13 dB 750 - 870 MHz
 Frequency Range - Agile - 93 MHz (Ch 7) to 876 MHz (Ch 137)
 RF Muting Ratio >65 dB
 In-Channel Spurious >35 dB Unequalized MER

General Characteristics

Power: 31 W @ 90 to 240V AC
 Operating Temperature: 0° to 50° C
 Storage Temperature: -40° to 70° C
 Size: 19.0" W x 12.0" D x 1.75"
 Weight: 5.5 pounds

Testing Results

UL: IEC 60950-1:2001, First Edition
EMC Directive: 89/336/EEC
 Generic Emissions Standard: EN61000-6-3:2001
 Product Specific Emissions: EN55022 Class A, FCC Part 15 Class B
 Generic Immunity Standard: EN 61000-6-1:2001
 Electrostatic Discharge: EN 61000-4-2
 Radiated Susceptibility: EN 61000-4-3
 Electrical Fast Transient/Burst: EN 61000-4-4
 Surge: EN 61000-4-5
 Conducted Susceptibility: EN 61000-4-6
 Voltage Dips and Interruptions: EN 61000-4-11
 Harmonic Current: EN 61000-3-2
 Voltage Fluctuations & Flicker EN 61000-3-3

Environmental:

ASTM D4169-Distribution Cycle 13- Assurance Level I Schedule A: Handling
 ASTM D4169-Distribution Cycle 13- Assurance Level I Schedule C: Vehicle Stacking
 ASTM D4169-Distribution Cycle 13- Assurance Level I Schedule F: Loose Load Vibration
 ASTM D4169-Distribution Cycle 13- Assurance Level I Schedule E: Vehicle Vibration
 MIL-STD-810 Method 507.2 Procedure III-Aggravated Humidity
 Altitude 20,000 ft @ 21 degrees C
 Vibration 10-30 Hz .39" 30 minute cycles
 Thermal Shock -40 degrees to +60 degrees C
 HALT Testing -10 to +70 degrees C @ 4g, 8g & 12g
 IEEE C62.41 Surge Resistance Test ± 1000V on video inputs
 RoHs compliant

QRF-5005DQ BACKPANEL



ORDERING INFORMATION

PART NUMBER	DESCRIPTION
QRF5005DQ	Digital QAM Processor

Note:

- Due to product enhancements, specifications are subject to change without notice



**Radiant
 Communications
 Corporation**

Phone: 908 757 7444 or
 800 969 3427
 Fax: 908 757 8666
 E-mail: sales@rccfiber.com

P.O. Box 867
 South Plainfield
 NJ 07080
 USA

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