

## Broadcast Network Gateway (BNG)

### BNG 6102 DS-3

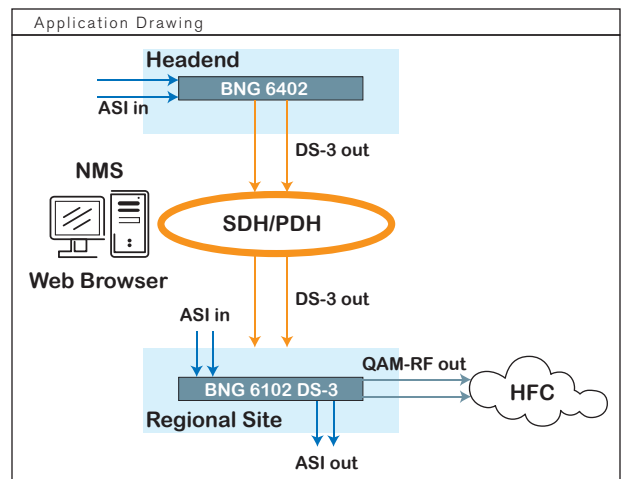
#### Product Description

The Broadcast Network Gateway (BNG) 6102 DS-3 is an edge QAM multiplexer designed for MPEG video broadcast over a telecom (DS-3) network. The system features highly flexible I/O options with two DS-3 as well as two ASI input interfaces. These inputs can be multiplexed to the component level onto two QAM RF (adjacent channels) or two ASI output interfaces (monitoring ports). The 1RU-high system supports full MPEG re-multiplexing functionality, including service insertion and PID remapping. Any component (PID) from any input can be mapped or remapped to any one of the outputs.

The BNG 6102 DS-3 includes a built-in QAM modulator and a dual-channel upconverter for the broadcasting of two MPEG transport streams over adjacent RF channels. The Two ASI output ports are monitoring ports that mirror the same content as the QAM RF outputs.

This BNG's typical application is in a regional headend (hub site) where it broadcasts content received over the telecom network (DS-3) or multiplexes local programs through the ASI input ports. Designed to receive data directly from a telephony transport network, the BNG matches the different rates between the DS-3 (44.736 Mbps) and ASI and QAM outputs, and compensates for the jitter introduced by the network.

The BNG 6102 DS-3 is managed through an easy to use, Web-based GUI accessible through any Web browser (e.g., Internet Explorer). A network operator can extract incoming services in addition to multiplexing and re-mapping any MPEG component to any output. The operator can also use the GUI to set the QAM constellation and select the RF parameters for the dual upconverter, as well as read and monitor all service alarms and alarm logs.



#### Features

- Compact 1RU chassis
- Inputs
  - 2 x DS-3 (44.736 Mbps)
  - 2 x ASI
- Outputs
  - 2 x QAM-RF (dual channel)
  - 2 x ASI (Monitoring outputs)
- Powerful multiplexing core allows multiplexing of any service from any input to any output
- User-friendly, Web-based management interface

## Inputs

### DS-3

Port Density	2 x DS-3
Format	Formatting MPEG for DS-3 networks, compliant to ANSI T1.107, M13 or C-bit parity framing
Bit Rate	2-43 Mbps
Processing	PCR correction of source jitter Bit rate matching FEC and interleaving
Connector	BNC connector, 75 $\Omega$

### ASI

Port Density	2 x ASI
Format	DVB ASI
Bit Rate	170 Mbps
Processing	MPEG-2 SPTS and MPTS 188 byte TS packets
Connector	BNC connector, 75 $\Omega$

## Outputs

### QAM RF

Port Density	2 x QAM (dual adjacent channels)
Frequency Range	50-860 MHz
Channel Bandwidth	ITUT-Annex B and DVB 6 MHz and 8 MHz
QAM Constellation	QAM 64, 128, 256
Connector	F-type, 75 $\Omega$ connector

### ASI

Port Density	2 x ASI configurable as monitoring ports or independent outputs
Format	DVB ASI
Bit Rate	Depends on monitored QAM
Processing	MPEG-2 SPTS and MPTS 188 byte TS packets
Connector	BNC connector, 75 $\Omega$

## Control Interfaces

Management	2 x 100BaseTX (Connector RJ-45)
Protocols	HTTP
Serial Port	RS232 (Reserved for factory use)

## Mechanical and Environmental Specifications

Input Voltage	100-240 VAC (Line frequency: 50-60 Hz)
Typical Power Consumption	100 W
Dimensions	1.75" H x 18.2" W x 23" D 4.45 cm H x 46.2 cm W x 58 cm D
Mounting	19", 1 rack unit high
Front Panel LED	Power, alarm and I/O status
Weight	15 lbs / 6.8 kg
Operating Temperature Range	32° to 122°F / 0° to 50°C
Storage Temperature Range	-40° to +158°F / -40° to 70°C
Relative Humidity	Maximum 90% non-condensing

## Product Ordering Information

Name	BNG 6102 DS-3
Part Number	BNG-2A2DS3-RMX-2Q
Description	
Interfaces	2 x DS-3 and 2 x ASI inputs to: 2 x QAM-RF (dual channel) and 2 x ASI (monitoring ports) outputs