

# NXG SYSTEM KIT

MODULE-BASED IP DIGITAL VIDEO PLATFORM



Shown: Mainframe Chassis, Master Controller, 2x Power Supplies, and 12x RFI Module Slot Covers.



Master Controller

## KEY FEATURES

- » System configuration and management via a powerful Linux-based monitoring and control system, providing IP routing and traffic management
- » Internal IP module provides IP input or output, freeing up a slot for other modules
- » Module interconnection via 60 Gbps capacity high-speed backplane
- » Hot-Swappable Fans and 2 fully-redundant power supplies

## PRODUCT OVERVIEW

The **NXG System Kit**, containing the Mainframe Chassis, Controller Module, and Power Supply, is a powerful 5RU set up that allows for complete customization based on specific technological needs.

The NXG addresses the challenges of migrating to future IP-DRM content protection practices while supporting today's CableCARD® ingest encryption.

## ORDERING INFORMATION



MODEL	STOCK #	DESCRIPTION
NXG-System Kit	<b>6799</b>	1x NXG 12-slot 5RU Chassis, 1x Master Controller, 2x Power Supplies

## MASTER CONTROLLER SPECIFICATIONS

### INPUT / OUTPUT

#### DATA PORTS

Gigabit Ethernet	4x RJ45 GigE for Control & IP Input <i>or</i> Output
SFP+	1x 10 GigE SFP+ data port for distribution of IP streams and remote monitoring & control

### ALARMS / MONITORING / CONTROL

Status	LED Indicators for Power, Temperature, Fans, and all network connections
Remote Monitoring / Control	GUI-based menu via web browser, automated e-mail system alarms, and SNMP traps for asynchronous alarms

- ⤵ System Configuration and Traffic Management
- ⤵ Alarm Summary and Event Logs
- ⤵ System Status of all Deployed NXG Modules
- ⤵ Import, Export, and Edit of Configuration Files
- ⤵ Remote Firmware Updates to all Modules
- ⤵ Authentication Management via TACACS+ (future)
- ⤵ Supports Fully-Redundant Configurations in IP-based Installations
- ⤵ Supports Fully-Redundant Configurations in QAM-based Installations with Additional HW
- ⤵ SNMP Support

### THE MASTER CONTROLLER MODULE IS AN INDUSTRIAL ETHERNET SWITCH SUPPORTING:

- ⤵ Configurable for Integration with Complex Networks
- ⤵ Full Management of Layer 2 and Layer 3 Forwarding
- ⤵ 802.1q VLAN Switch with 32K MACs and 4K VLANs

## OPTIONAL DRM, ENCRYPTION / DECRYPTION

- ⤵ Pro:Idiom® Bulk Content Encryption
- ⤵ Verimatrix Bulk Descrambling (future)
- ⤵ MOBIV / Widevine Bulk DRM Descrambling
- ⤵ Various Multicast Configurations Supported
- ⤵ Innovative Systems InnoCrypt Bulk Descrambling
- ⤵ Unicast with MPEG-DASH Termination
- ⤵ Customized AES Compliant Encryption/Decryption for Private Network Deployment Architectures

# NXG SYSTEM KIT

## SPECIFICATIONS



## MAINFRAME POWER & BACKPLANE SPECIFICATIONS

GENERAL - MAINFRAME BACKPLANE	
<b>Dimensions (W x H x D)</b>	19.0 x 8.72 x 18.6 in (483 x 221 x 472 mm)
<b>Weight</b>	17 lbs (7.7 kg)
<b>Power</b>	100-240 VAC
<b>Power Consumption</b>	16 W (Master Controller Only)
<b>Operating Temp.</b>	32 to 122 °F (0 to 50 °C)
<b>Storage Temp.</b>	-13 to 158 °F (-25 to 70 °C)
<b>Operating / Storage Humidity</b>	0 to 95% RH @ 35 °C max, non-condensing

GENERAL - POWER SUPPLY UNIT	
<b>Dimensions (W x H x D)</b>	2.15 x 1.57 x 9.0 in (54.5 x 40 x 228 mm)
<b>Weight</b>	1.8 lbs (0.81 kg)
<b>Power</b>	
<b>In</b>	100-240 VAC; 9A; 50/60 Hz
<b>Out</b>	12 VDC; 54.2A; 650 W Max
<b>Power Consumption</b>	650 W (Each Power Supply)
<b>Operating Temp.</b>	23 to 122 °F (-5 to 50 °C)
<b>Storage Temp.</b>	40 to 158 °F (-40 to 70 °C)
<b>Operating/Storage Humidity</b>	5 to 96% RH @ 45 °C max, non-condensing

- ↳ 60 Gbps Capacity; 2.5 Gb Bi-directional to each individual NXG Module
- ↳ 12 Module Slots Configurable to Your Application
- ↳ Easily Replaceable Fans for Heat Dissipation
- ↳ Front to Back Airflow; Cleanable / Replaceable Air Filters

- ↳ Internal Fan for Heat Dissipation
- ↳ Status LEDs
- ↳ Hot-Swappable

TYPICAL BTU REQUIREMENTS						
Modules	2	4	6	8	10	12
<b>Watts</b>	102	162	194	242	290	350
<b>BTUs</b>	348	554	664	827	990	1200
	1=NXG-CCQD-24	2=NXG-CCQD-24	4=NXG-CCQD-24	6=NXG-CCQD-24	7=NXG-CCQD-24	8=NXG-CCQD-24
	1=NXG-32CH-QM	2=NXG-32CH-QM	2=NXG-32CH-QM	2=NXG-32CH-QM	3=NXG-32CH-QM	4=NXG-32CH-QM

Contact the BT Labs' Systems Engineering Dept. (M-F, 8-5p ET) for exact BTU specifications based on your module use.

## ORDERING INFORMATION

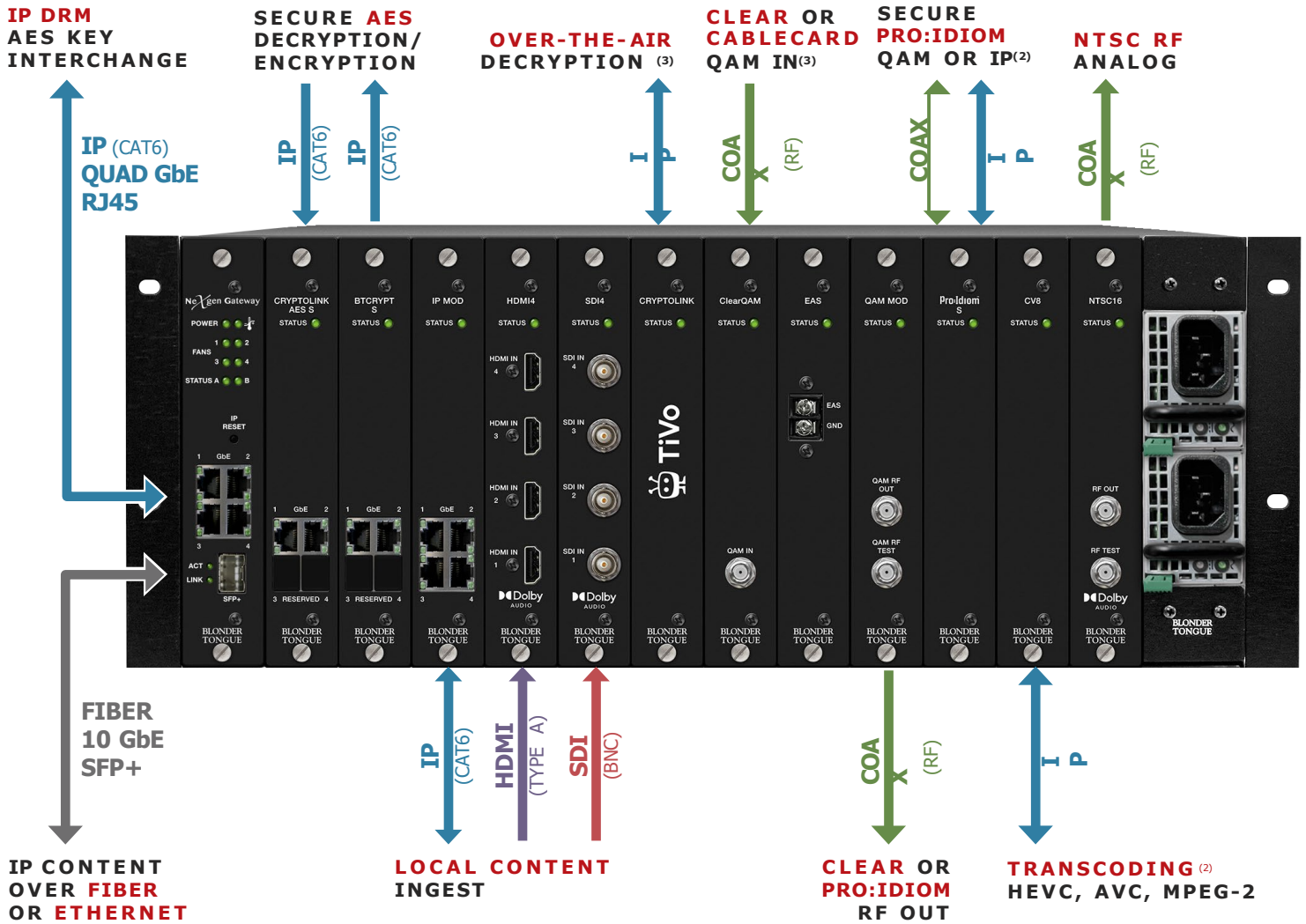


MODEL	STOCK #	DESCRIPTION
NXG-System Kit	<b>6799</b>	1x NXG Chassis (5RU; 12 module slot; 60Gb Capacity IP Backplane), 1x Master Controller (Controls Entire NXG Platform), 2x Power Supplies (required for Redundancy; Hot-Swappable)

# NXG SYSTEM KIT

MODULE-BASED IP DIGITAL VIDEO PLATFORM

## NXG SYSTEM OVERVIEW <sup>(1)</sup>



- (1) Diagram does not represent all current or future module options or combinations.
- (2) Modules input and/or output through the backplane.
- (3) IP Modules available as SPTS or MPTS versions. CableCARD not shown.

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