

PoE 802.3af

# GENERAL INFORMATION

The Net3 Four Port Gateway is a network data distribution device designed to take advantage of the quality and reliability of ETC's Network development, built for both the proven ETCNet2<sup>™</sup> protocols and the new industry standard ACN. The Gateway is an Ethernet native network device that uses bidirectional communication with other network devices to send/receive DMX512 digital signals (as well as RDM depending on software mode) via the four configurable ports on the rear of the unit.

(h) (c) (100V 115/120V 230/240V

#### APPLICATIONS

- Road House
- Touring
- University/Professional Theatre
- Convention Hall
- Tech Tables
- Stage Managers Panels

#### FEATURES

- Four ports of distributed DMX over Ethernet
- Supports Net3 protocol powered by ACN
- Supports ETCNet2
- DMX/RDM Output/Input (RDM with Net3 Release 2 only)
- Distributes DMX data to any input/output device such as dimmers, scrollers, moving lights and DMX consoles
- Modular DMX/RDM port design provides easy configuration of port connector type and replacement
- DMX via XLR 5-pin Male, Female and terminal strip connectors
- LCD screen for labeling, status and configuration information
- LED power and network indicators
  Supports Power over Ethernet (PoE
- Supports Power over Ethernet (PoE) as well as an external DC power supply
- Versatile compact size
- Configurable via a network software utility or directly through ACN

# ORDERING INFORMATION

#### **Net3 Four Port Gateway Bundles**

MODEL	DESCRIPTION
N34G-4F	Net3 ACN DMX/RDM Gateway - 4 Out
N34G-4M	Net3 ACN DMX/RDM Gateway - 4 In
N34G-4T	Net3 ACN DMX/RDM Gateway - 4 Terminal
N34G-2M2F	Net3 ACN DMX/RDM Gateway - 2 Out-2 In
N34G-2F	Net3 ACN DMX/RDM Gateway - 2 Out

Bundles come complete with the Gateway, Rack Mount Kit and International Power Supply

## **Net3 Four Port Gateway Components**

MODEL	DESCRIPTION
N34G-4B	Net3 Gateway Unit - no modules (4 blank plates)
N34G-MM	Net3 Gateway Module - Male 5-pin XLR DMX In
N34G-FM	Net3 Gateway Module - Fem. 5-pin XLR DMX Out
N34G-TM	Net3 Gateway Module - 8 pos. Terminal Strip
N34G-RJM	Net3 Gateway Module - RJ45 connector
N34G-BM	Net3 Gateway Module - Blank

#### **Net3 Four Port Gateway Accessories**

MODEL	DESCRIPTION
N34G-FP4F	Net3 Gateway Front Panel Kit - DMX 4 Out*
N34G-4P2M2F	Net3 Gateway Front Panel Kit - DMX 2 In 2 Out*

\*Does not include Rack Mount kit for mounting

#### **Net3 Gateway Accessories**

MODEL	DESCRIPTION
N3GA-PS	Net3 Gateway International Power Supply*
N3GA-RM	Net3 Gateway Rack Mount Kit
N3GA-HBU	Net3 Gateway Hanging Bracket Kit with U-bolt

\*PS-INTL includes plugs for American/Japanese, European 2-pin, British 3-pin, and Australian/Chinese 2-pin. Used with Net3 Four Port, Two Port, Show Control and I/O Gateways



# SPECIFICATIONS

#### GENERAL

- Distributes DMX over Ethernet to any input/output device such as dimmers, consoles, scrollers, moving lights...
- Compliant with IEEE 802.3i for 10BASE-T, 802.3u for 100BASE-TX and 802.3af for Power over Ethernet
- CE compliant and ETL Listed
- RoHS Compliant (lead-free)
- ETCNet2 and Net3/ACN protocols
- Meets RDM BSR E1.20 Standard
- USITT DMX512 and ANSI E1.11 DMX512-A compliant

#### MECHANICAL

- Fabricated of 16-gauge steel
- Finished in fine-texture, scratch-resistant, black powder coat
- Backlit LCD display for identification (soft-labeling) and status reporting:
- Gateway identification Name, IP address, software version
- Network configuration
- DMX port configuration
- DMX port status
- Menu Button for backlight/paging control
- Power (blue) and Network present/activity (green) LED indicators on front and rear
- Reset button for hard reset/forced reboot
- Single RJ45 Ethernet jack on front of unit
- 1/2 rack width allows for up to 8 DMX ports in 1U height
- Hanging Bracket allows mounting in 4 orientations, includes U-bolt hardware (C-clamp available)

#### PROCESSOR

- Maximum delay time from input to output not greater than one packet time (minimum 22 mSec.)
- Four selectable DMX output update rates with maximum setting not less than 40Hz

## ENVIRONMENTAL

- Ambient operating temperature: 0° to 40°C (32° to 104°F).
- Storage temperature: -40° to 70°C (-40° to 158°F).
- Operating humidity: 5% 95% non-condensing.

## POWER

- Power Supply options include:
  - 8 to 28Vdc external power supply
- 48V IEEE 802.3af Power over Ethernet
- Maximum power consumption 5 watts

#### MODULAR DMX PORTS

- Up to 4 DMX ports four module locations on the rear
- Each module contains a single connector and its associated electronics
- Capable of withstanding fault voltages of up to 250VAC
- Switch for DMX/RDM termination
- Connector module options include:
- XLR 5-Pin Male DMX input connector
- XLR 5-Pin Female DMX output connector
- RJ45 DMX connector
- Screw Terminal strip connector (DMX Termination kit included)\*
- Module secured by panel screw
- Pull-tab for easy removal

\*Contact ETC for optional IDC termination kit to support Cat 5, 5E or 6 cable.

# SPECIFIC ATIONS

#### CONFIGURATION

- ETCNet2 Mode configuration using Network Configuration Editor (NCE) v4.1 or later
- Net3 Mode configuration provided by Gateway Configuration Editor (GCE)
- 2048 DMX In or DMX Out channels
- Control up to 512 DMX addresses per port, within the confines of up to 64 DMX "universes" (32,767 EDMX addresses) when using EDMX and up to 64,279 "universes" (32,910,848 DMX addresses) when using Streaming ACN.
- User configurable labeling
- Specific DMX data input or output configurable by user
- Duplicate outputs of DMX lines (DMX splitter) and discrete outputs fully supported
- Any number of DMX universes may be configured with any length up to 512 addresses as long as the total does not exceed 32,767.
- Multiple sources may be combined and a priority may be assigned to each source.
- Individual port start address and offset for ease of use

# ADDITIONAL INFORMATION

### DMX512

Often shortened to DMX (Digital MultipleX), is a communications protocol used mainly to control stage lighting. DMX is a nearly continuous stream of level information repeating levels in order from 1 to 512. It is a form of RS-485 digital serial communication.

## RDM

Remote Device Management is a protocol enhancement to DMX512 that will allow low-speed bidirectional communication between a system controller and attached RDM compliant devices over a standard DMX line. This protocol will allow configuration, status monitoring, and management of these devices.

## sACN

'Streaming ACN,' details DMX-style control over TCP/IP networks. It provides a fast and efficient mechanism to transport the wellunderstood DMX protocol over Ethernet in an open, industrystandard way.

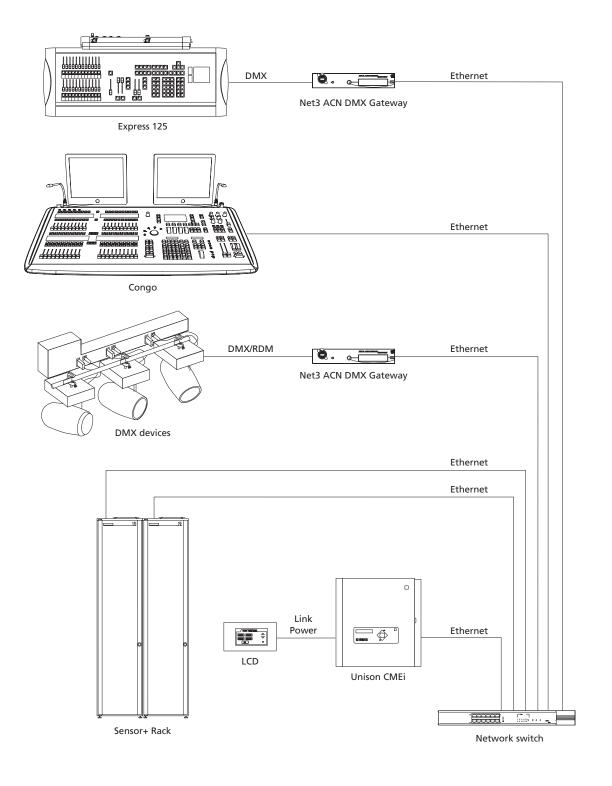
## ACN

Architecture for Control Networks is a standard for high-speed bidirectional communication over standard TCP/IP on Ethernet network infrastructure. ACN is an open-ended suite of protocols used between network devices for the purposes of greater and more adaptive control in theatre applications.

#### NET3

ETC's implementation of a superset of the standard ACN Protocol Suite including additional proprietary communication protocols for legacy support or specialized applications.

# TYPICAL SYSTEM RISER



# PHYSICAL

# **Net3 Four Port Gateway Dimensions**

MODEL	HEIGHT		WIDTH		DEPTH	
	inches	mm	inches	mm	inches	mm
Gateway Unit	1.71	44	8.5	216	8.2	208

# Net3 Four Port Gateway Bundles

MODEL	WEIGHT		SHIPPING WEIGHT		
	lbs	kgs	lbs	kgs	
N34G-4F	6	2.7	8	3.6	
N34G-4T	6	2.7	8	3.6	
N34G-2M2F	6	2.7	8	3.6	
N34G-2F	5.5	2.5	8	3.6	

Bundles come complete with the Gateway, Rack Mount Kit and external International Power Supply.

## **Net3 Four Port Gateway Components**

MODEL	WEIGHT		SHIPPING WEIGHT	
	lbs	kgs	lbs	kgs
N34G-4B	3	1.4	7	3.2
N34G-MM	0.3	0.1	1	0.5
N34G-FM	0.3	0.1	1	0.5
N34G-TM	0.4	0.2	1	0.5
N34G-RJM	0.4	0.2	1	0.5

The Terminal Strip Module comes with ETC's standard DMX termination kit and 8-pos. screw terminal header

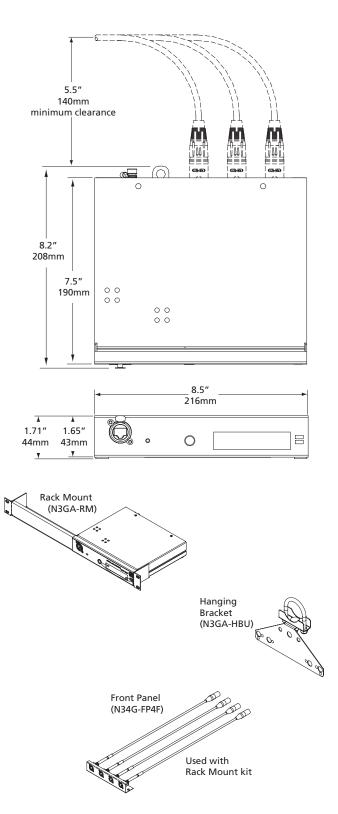
#### **Net3 Four Port Gateway Accessories**

MODEL	WEIGHT		SHIPPING WEIGHT	
	lbs	kgs	lbs	kgs
N34G-FP4F*	1.1	0.5	2	0.9
N34G-FP2M2F*	1.1	0.5	2	0.9

\*Does not include rack Mount kit for mounting

#### **Net3 Gateway Accessories**

MODEL	WEIGHT		SHIPPING WEIGHT		
	lbs	kgs	lbs	kgs	
N3GA-PS	0.5	0.2	1	0.5	
N3GA-RM	1.5	0.7	2	0.9	
N3GA-HBU w/U-Bolt	0.8	0.4	1	0.5	





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