NAPCO | COMMERCIAL
FIREWOLF

Power Supply—NAC
GEMC-NACXX

FEATURES

- 4-Supervised Outputs suitable as 24V, maximum 2A
- each, combined 6.5A maximum regulated Notification
- Appliance Circuits. These outputs can be configured as:
  4 Class B or
  1 Class A and 2 Class B or
  2 Class A
- 3-Unsupervised Form-C Dry relay outputs activated by a programmed event generated by the Gemini C-Series control panel
- One supervised, isolated GEMC-Remote Bus interface
- One normally-closed (N/C) housing tamper input, identified by trouble on dedicated integral EZM zone
- Isolated integral ground-fault detection circuit (
- One isolated input (terminals 1-2) to synchronize
- "Smart" outputs (Listed *Wheelock* or *System Sensor* horns/strobes) with other outputs from the C-Series motherboard or other GEMC-NACXX devices
- Power supply contains integral battery charger capable of charging up to 4 pairs of 7AH / 7.5AH / 8AH sealed lead acid or gel type 12V batteries.
- The system monitors for low battery, no battery, brown-out and monitors battery charging circuit voltage, identified by battery trouble on dedicated integral EZM zone
- Remote bus interface and two Inputs are isolated, thus allowing for separate ground fault detection and annunciation
- Allows audible notification appliances (horns) to be silenced while visual appliances (strobes) continue to operate
- Input allows synchronized *Wheelock/System Sensor* operation between the motherboard or other C-Series NAC circuits, allowing for multiple NAC circuits to be used within the same area
- Each of the 4 NAC circuits are individually supervised for opens or shorts, and will annunciate and report separately
- Solid State over-current protection on the four NAC's

OVERVIEW

The **GEMC-NAC7S** or **GEMC-NAC7L** (referred to as "**GEMC-NACXX**" throughout this data sheet) can be used as either:

- A UL864 9th edition accessory to a Gemini C-Series Combination Fire & Burglary Alarm control panel

AGENCY LISTINGS

- UL864 9th edition: UL Listed Control Units and Accessories for Fire Alarm Systems
- CSFM: California State Fire Marshall
- NFPA 72 National Fire Alarm Code
- UL864 9th Edition: Commercial Fire
- NFPA 72 National Fire Alarm Code
- NYCFD: NYC Fire Department

--or--

- A UL864 9th edition NAC Extender for use with any listed Fire Alarm Control Panel (FACP)

Notification Appliance Circuits (NAC's)

A Notification Appliance Circuit is a circuit or path directly connected to a *notification appliance*, i.e. any audible, tactile or visual signal--or any combination thereof--employed to indicate a fire, supervisory or trouble condition. The Gemini C-Series control panels comply with National Fire Protection Association (NFPA) requirements for temporal pulse sounding of fire notification appliances. Use only the specified UL Listed notification appliances.

SPECIFICATIONS

Electrical Ratings

Input Power:

Primary input power: 120VAC, 50/60Hz, 3A, maximum 15A dedicated branch circuit.

Secondary power: 24V operation, up to eight 12V / 7AH / 7.5AH / 8AH batteries in pairs (7AH-32AH standby).

Fire Bus Input Power Rating: 12.0V Nominal, 8mA.

Output Power:

Total Output Power: 24VDC, 7A maximum, power limited outputs. Each NAC circuit output rated @ 2A maximum.

Optional Auxiliary Output Power: 2A maximum per circuit in alarm; 1.1A @ 24V maximum standby current (depending on batteries utilized) for 24 hours. Any of the 4 NAC's can be used for auxiliary outputs by programming the output with the feature "Reverse Polarity" (see the "**NAC/Output Assignment**" screen in PCD-Windows Quickloader software). Auxiliary power is 24V Special Applications for use with the GEMC-24VR; these auxiliary outputs are then 24V Regulated.

Supervision:

- AC fail supervision local annunciation, approximate 1 minute delay to prevent nuisance swingers
- Battery presence, low battery supervision and battery charger voltage supervision; combined to generate a common battery trouble
- Remote bus supervised for opens, shorts or ground faults

Additional GEMC-NACXX Specifications:

NAC End-of-Line Resistor: 2.2K ohms (NAPCO EOL2.2K).

Common Trouble Relay ("Out Relay 5"): 30VDC @ 1A, 30VAC @ 1A Resistive, connect to power limited circuits only.

Common Trouble Relay ("Out Relay 6"): 30VDC @ 1A, 30VAC @ 1A Resistive, connect to power limited circuits only.

Common Trouble Relay ("Out Relay 7"): 10A / 120VAC; 2.5A / 30VAC / DC Resistive Load.

Input control circuit: 10-30VDC @ 20mA maximum.

Operating Temperature: 32°F to 120°F (0°C to 49°C).

Operating Humidity: Maximum 85% relative humidity @ 30°C.

PHYSICAL

Housing

The GEMC-NACXX comes complete with 7A power supply, enclosure and ample room for standby batteries. Two models are available, as determined by the size of the enclosure:

Enclosure Dimensions (W x H x D, Inches):

- The **GEMC-NAC7S** uses the small housing with sufficient room for two pair of 12V standby batteries (model **GEMC-HSKIT1416**, size 14.25" x 16" x 5.25")
- The **GEMC-NAC7L** uses the large housing with room for four pairs of 12V standby batteries (model **GEMC-HSKIT1425**, size 14.25" x 24" x 5.25")

ORDERING INFORMATION

GEMC-NACXX: Remote NAC Extender.