# CONX

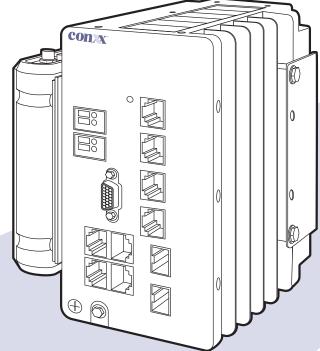
### PATENT PENDING

CONXX Headquarters • 434 North Centre Street • Cumberland, Maryland 21502 PHONE (888) 882-6699 • www.conxx.net • FAX (888) 992-6699

# GLOBAL GRID ROUTER™

The patent pending CONXX Global Grid Router™ provides industry-leading IP/MPLS communications capabilities over a common carrier LTE network in a DIN rail-mountable compact form factor with temperature, electromagnetic, shock and vibration hardening.

The Global Grid Router™ is ideally suited for deployments in harsh and cramped environments where multiple methods of connecting are desired, like WiMAX with LTE backup, or multiple LTE carriers. This bundle is particularly well suited for smart grid distribution and field area automation or rolling rail vehicles' on-board applications. It is ideal for secure and reliable delivery of mission-critical applications for network operators in utilities, transportation, government and public safety.



# **KEY BUNDLE FEATURES**

- 10 Year Globally Connected
- Ruggedized for vibration, shock, dust, splash & humidity
- Certified 3G/4G/LTE enterprise grade external modem
- Software defined radio supports
- Built-in transient and reverse polarity voltage protection
- Out of Band modem and router management
- 9–36 DC voltage input range
- Integrated temperature sensors
   Active GPS support

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# GLOBAL GRID ROUTER™

# A MEMBER OF THE GRID OBSERVER FAMILY OF PRODUCTS



The GGR™ is equipped and configured with two LTE modems and one wired WAN port for robust and diverse connectivity. Also included is one always connected 10Year LTE Global SIM to a global LTE carrier. This enables rapid deployment with a pre-configured backhaul connection allowing complimentary deployments to existing WAN's as well as new site deployments.



The GGR™ is designed for communications in environments where size and flexibility are critical, while providing powerful service-oriented networking capabilities. The bundle is well suited for utility, railway and other industries. Power utilities, for example, require highly reliable communications infrastructure for smart grid projects such as grid modernization, substation automation, distribution automation, and advanced metering infrastructure (AMI).



The  $GGR^{\mathbb{M}}$  includes out of band management which virtually eliminates stranded equipment that otherwise would result in extended drive time and or extended outages. The solution can be used as either primary or as backup data communications.



Included with the  $GGR^{\mathbb{M}}$  is a compact, ruggedized 3G/4G/LTE networking modem designed for mission-critical connectivity in the most challenging environments. Ideal for field networks, mass transit or utility networks. The modem is engineered to protect against extreme temperatures, humidity, shocks, vibrations, dust, water splash, reverse polarity, and transient voltage.

# **QUICK STATS**

- Global Grid Router<sup>™</sup> supports a variety of tunneling options including MPLS, IP and Generic Routing Encapsulation (GRE) for aggregating and transporting traffic between sites and locations
- This bundle is powered by a 10-year Global SIM with 2GB of Data Throughput per month and options for 5GB
- 10 Year Globally Connected LTE Service Aggregation Router
- Single Capex Expenditure with no ongoing fees

# TECHNICAL SPECIFICATIONS HARDWARE

## **GGR TECHNICAL SPECIFICATIONS**

Operating temperature:  $-40^{\circ}$ C to  $+70^{\circ}$ C ( $-40^{\circ}$ F to  $+158^{\circ}$ F) sustained with a minimum airflow rate of 0.5 m/s,  $-40^{\circ}$ C to  $+65^{\circ}$ C ( $-40^{\circ}$ F to  $+149^{\circ}$ F) in a still air environment

Power: (redundant DC feeds):  $\pm 20 \text{ V}$  DC to 36 V DC

# Physical dimensions:

— Height: 177.8 mm (7 in)

Depth: 152.4 mm (6 in)

Width: 91.4 mm (5 in)

Weight: 2.54 kg (5.6 lb)

# Mounting:

— DIN rail

Wall/panel

IP40 Packaging

Cooling: Fanless, passively cooled

# Power Utility Substation:

— IEEE 1613 Class 2

IEC 61850-3

Railway:

EN 50121-4

EN 50155

# **GGR INTERFACE TYPES**

# Main Chassis:

Two 10/100/1000BASE-T Ethernet ports (RJ-45 PoE/PoE+ capable)

Two 10/100/1000BASE-T Ethernet ports (RJ-45)

Two 100/1000BASE-TX ports (SFP)

Two RS-232 (async) ports

# **GGR BACKUP WAN CHASSIS**

Integrated 4G LTE modem (with 3G failover)

Three LAN/WAN switchable 10/100 Ethernet ports – two default LAN

Two cellular antenna connectors (SMA)

One active GPS antenna connector (SMA)

Serial DE-9 (commonly called "DB-9") connector – RS-232 (out-of-band management of an external device requires a null modem adapter/cable)

