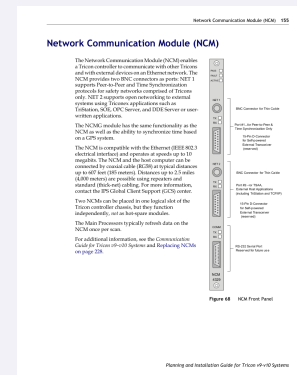


FIELD INSTALLATION QUICK GUIDE

Installation Instructions

Invensys Triconex 4329G

Network Communication Module



PRODUCT	4329G
FAMILY	Tricon v9-v10
FUNCTION	Network Communication Module
STATUS	Verify exact configuration

Prepared by Amikon Limited from Invensys 9700077-012, February 2009. This guide does not replace the complete manufacturer manual, site procedure, hazardous-area drawing, or approval document.

01 CONFIRM THE ORDERED CONFIGURATION

Network connectors	Two BNC ports
Network cable	RG58, 50-ohm coaxial thin cable
Ethernet electrical interface	IEEE 802.3
Communication speed	Up to 10 Mbps
Typical direct coaxial distance	Up to 185 m (607 ft)
Extended network distance	Up to 4000 m using repeaters and standard thick-net cabling
External transceiver ports	Not used

02 MOUNTING AND CONNECTION

- Record the exact module identity and network-address switch setting.
- Disconnect module communication cables without breaking network end terminations.
- Expect all communication through the removed NCM to cease.
- Copy the original address switch setting to the replacement before insertion.
- Seat firmly and tighten retractable fasteners to 10 inch-pounds.

Network Communication Module (NCM)

The Network Communication Module (NCM) enables a Tricon controller to communicate with other Tricons and with external devices on an Ethernet network. The NCM provides two BNC connectors as ports: NET 1 supports Peer-to-Peer and Time Synchronization protocols for safety networks comprised of Tricons only. NET 2 supports open networking to external systems using Triconex applications such as TriStation, SOE, OPC Server, and DDE Server or user-written applications.

The NCMG module has the same functionality as the NCM as well as the ability to synchronize time based on a GPS system.

The NCM is compatible with the Ethernet (IEEE 802.3 electrical interface) and operates at speeds up to 10 megabits. The NCM and the host computer can be connected by coaxial cable (RG58) at typical distances up to 607 feet (185 meters). Distances up to 2.5 miles (4,000 meters) are possible using repeaters and standard (thick-net) cabling. For more information, contact the IPS Global Client Support (GCS) center.

Two NCMs can be placed in one logical slot of the Tricon controller chassis, but they function independently, *not* as hot-spare modules.

The Main Processors typically refresh data on the NCM once per scan.

For additional information, see the *Communication Guide for Tricon v9-v10 Systems* and *Replacing NCMs* on page 228.

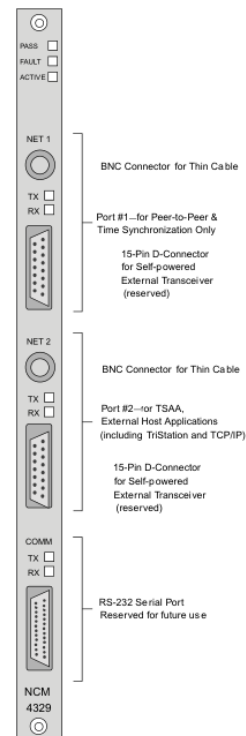


Figure 68 NCM Front Panel

04

CABLE ROUTING AND CONNECTION

- Disconnect module communication cables without breaking network end terminations.
- Expect all communication through the removed NCM to cease.
- Copy the original address switch setting to the replacement before insertion.
- Seat firmly and tighten retractable fasteners to 10 inch-pounds.
- Verify Pass in approximately 1 minute, Active in 1-2 minutes and restored communications.

05

INITIAL SYSTEM CHECKS

- Confirm model identity and compatible system components before energizing.
- Verify wiring, grounding, enclosure, and applicable hazardous-area requirements.
- Confirm normal indications and fault-contact state after commissioning.
- Record the installed order number and baseline operating condition.

06

CONTROLLED DOCUMENTS

Official source	Invensys 9700077-012, February 2009
Product record	4329G
Manufacturer	Invensys Triconex
Support	INFO@AMIKON.CN