



PACSystems* RX3i Genius* Communications Gateway

Bring Ethernet Connectivity to your Existing Genius System

GE Intelligent Platforms has sold Genius, one of the first remote I/O applications, for more than 30 years. As Genius I/O reaches the end of its lifecycle, GE is committed to helping customers migrate to the advantages of an Ethernet-based control system while minimizing downtime and keeping existing wiring and application software.

With the PACSystems RX3i Genius Communications Gateway, Genius customers can seamlessly migrate their system without replacing I/O, and connect Genius blocks to an Ethernet-based control system that can gather, view, and analyze machine data and quickly and easily connect to other systems.

Get the most from your automation system. By trusting GE as an ongoing partner when modernizing your Genius-based systems, your organization can enter the age of the Industrial Internet, on your timetable, while improving connectivity, performance, and profitability.

Plug & Play, Don't Rip & Replace

Save time and money. With the RX3i Genius Communications Gateway, you can modernize your existing Genius system without re-wiring your I/O. GE gives you the flexibility to migrate your system from Genius to the advantages of Ethernet and PROFINET connectivity how, where, and when you want with minimum disruption to your operations.

Simplify Migration

When you migrate with the Genius Communications Gateway, you keep your application program and your data. The I/O references configure seamlessly to get you back up and running quickly with your new control system.

Secure your Investment

Be confident in the legacy of GE quality that has served thousands of customers well for decades. Take advantage of GE recommendations for securing network deployments.

Connect to the Industrial Internet

Connect your Genius I/O block to an Ethernet network with the RX3i Communications Gateway to take full advantage

of the Industrial Internet. By replacing proprietary cabling with Ethernet, data is no longer locked inside your machine. Now you can make your machines brilliant machines by gathering, viewing, and analyzing data with Historian, SCADA, and other software solutions and easily connecting to other machines.

Get the PROFINET Advantage

The Genius Communications Gateway is the easiest way to take your Genius installation from any point in the application and turn it into a PROFINET connection. PROFINET is the leading industrial Ethernet protocol, offering quick, easy, cost-effective connection of all levels of industrial systems. This high-speed, open standard makes it easy to mix and match any form of I/O—including Genius—and incorporate third-party products.

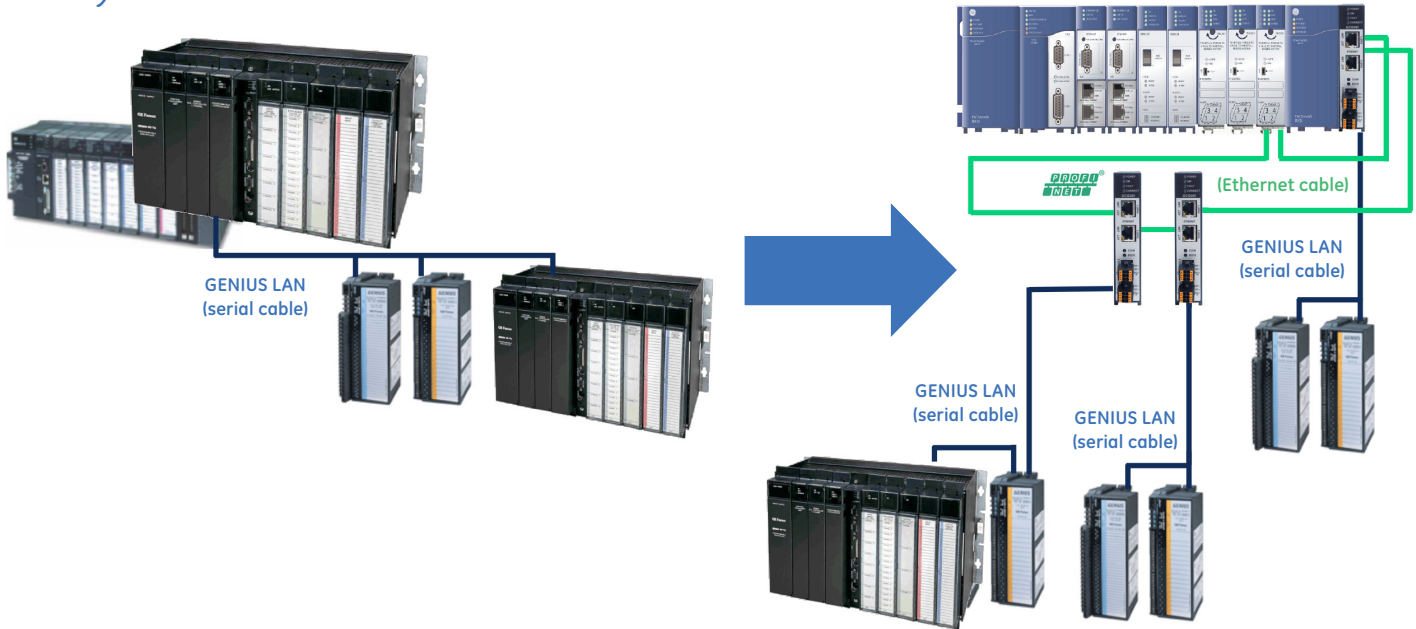
Migrate with GE, the Genius Inventor

GE invented Genius, so we're the only choice for migrating our proprietary protocol while keeping your existing application code and wiring. Take advantage of seamless I/O auto-detection and configuration. Upgrade your systems with GE RX3i Genius Communications Gateway today.



PACSystems RX3i Genius Communications Gateway

Migrating Series 90* and GENIUS Systems to PACSystems & PROFINET



Specifications

Power Requirements

- 24 VDC; 0.19 A maximum

Operating Temperature

- 0°C to 60°C

Number of Port Connectors

- 2- RJ45 100 MBit/s Full Duplex Ethernet, 2 - 6-pin serial GENIUS¹

I/O Production Rate (I/O Update Rate)

- Configurable selections: 2ms, 4ms, 8ms, 16ms, 32ms, 128ms, 256ms, or 512ms

I/O Station Maximum Limits

- Number of GENIUS Devices per GCG
 - Up to 31 GENIUS blocks or devices

- IO data per GCG
 - 2048 bytes total
 - 1024 bytes of input data
 - 1024 bytes of output data

GENIUS Bus Speeds Supported

- 153.6 Kbps Standard, 153.6 Kbps Extended

Supported Protocols

- RTC - Real Time Cyclic Protocol, Class 1 and 2 (unsynchronized)
- RTA - Real Time Acyclic Protocol
- DCP - Discovery and configuration Protocol
- CL-RPC - Connectionless Remote Procedure Call
- LLDP - Link Layer Discovery Protocol
- MRP - Media Redundancy Protocol
- SNMP - Simple Network Management Protocol

Used Protocols (Subset)

- UDP, IP, ARP, ICMP (Ping)

Topology Recognition

- LLDP, SNMP V1, MIB2, physical device

VLAN- and Priority Tagging

- Yes

Context Management by CL-RPC

- Supported

Data transport layer

- Ethernet II, IEEE 802.3

Ordering Information

IC695GCG001

Genius Communications Gateway

GE Intelligent Platforms Contact Information

Americas: **1 800 433 2682** or **1 434 978 5100**

Global regional phone numbers are listed by location on our web site at www.ge-ip.com/contact

www.ge-ip.com

