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Data Sheet
August 15, 2026

GE FANUC

GE Fanuc IC693BEM331 I/O Bus / Genius Bus Controller

GE Fanuc IC693BEM331 Series 90-30 Genius Bus Controller The IC693BEM331 Genius Bus Controller interfacesaSeries 90-30 PLC toaGenius I/O serial bus. OEM GFK-1034B and Series 90-30 hardware manuals rate up to 31 devices, 128 bytes of I/O and Global Data per device per scan, current less than 300 mA at plus 5 V from the backplane, configurable 153.6 kbaud standard/extended, 76.8 kbaud, or 38.4 kbaud, and up to eight GBCs inarelease 5.0 or later CPU system. Distributed Genius discrete/analog blocks, Field Control, and PLC-to-PLC Global Data on Series 90-30 racks. The IC693BEM331 Genius Bus Controller interfacesaSeries 90-30 PLC toaGenius I/O serial bus. OEM GFK-1034B and Series 90-30 hardware manuals rate up to 31 devices, 128 bytes of I/O and Global Data per device per scan, current less than 300 mA at plus 5 V from the backplane, configurable 153.6 kbaud standard/extended, 76.8 kbaud, or 38.4 kbaud, and up to eight GBCs inarelease 5.0 or later CPU system. Distributed Genius discrete/analog blocks, Field Control, and PLC-to-PLC Global Data on Series 90-30 racks.

MODEL GE Fanuc IC693BEM331	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU IC693BEM331	LISTING https://aumictechlabs.com/products/ic693bem331-2/

NIST-traceable cal · SAM registered · 30-day returns · NAICS 423690 · 811210 · 541380

This unit

The GE Fanuc IC693BEM331 is an I/O Bus and Genius Bus controller designed for the Series 90-30 programmable logic controller ecosystem. This module manages communication between I/O modules and the central PLC processor, supporting dual protocol operation for flexible industrial automation architectures. It enables integration of distributed I/O and intelligent devices across both I/O Bus and Genius Bus networks, expanding system scalability and diagnostic capabilities in demanding control environments. Technical Specifications Product Type: I/O Bus / Genius Bus Controller Manufacturer: GE Fanuc Series Compatibility: Series 90-30 Communication Protocols: I/O Bus, Genius Bus Primary Function: Facilitates communication between I/O modules and PLC processor Form Factor: DIN rail or rack-based mounting within Series 90-30 systems Power Source: Series 90-30 PLC backplane Key Features Dual-protocol support enables I/O Bus and Genius Bus device integration on a single controller Distributed I/O and diagnostics via Genius Bus protocol Standard I/O Bus connectivity for GE Fanuc I/O modules Operates within standard industrial environmental conditions Designed for industrial vibration and shock environments Typical Applications Multi-protocol distributed control systems Industrial automation requiring both legacy I/O Bus and modern Genius Bus devices Systems requiring centralized I/O management with extended diagnostics Flexible control architectures in manufacturing and process automation Compatibility & Integration The IC693BEM331 integrates directly into Series 90-30 PLC rack systems and maintains full compatibility with GE Fanuc I/O modules utilizing the I/O Bus protocol. Genius Bus compatibility extends to intelligent devices and modules designed for distributed control and real-time monitoring. Installation follows standard Series 90-30 hardware mounting conventions.

IC693BEM331 Characteristics / Specifications

PARAMETER	VALUE
Model	IC693BEM331
Instrument Type	Genius Bus Controller
Plc Series	Series 90-30
Maximum Devices	31 on the Genius bus
Global Data Transmit	up to 128 bytes per bus scan
Global Data Receive	up to 128 bytes from each of up to 31 devices
Output Data Per Device	up to 128 bytes
Input Data Per Device	up to 128 bytes
Current Consumption	less than 300 mA at plus 5 VDC
Backplane Supply	5 VDC from the Series 90-30 baseplate
Baud Rates	153.6 kbaud standard, 153.6 kbaud extended, 76.8 kbaud, 38.4 kbaud
Maximum Bus Length 38p4 Kbaud	7500 feet
Maximum Bus Length 76p8 Kbaud	4500 feet
Maximum Bus Length 153p6 Extended	3500 feet
Maximum Bus Length 153p6 Standard	2000 feet
Devices At 38p4 Kbaud	16 including GBC and typically an HHM
Devices At Higher Baud	32 at 153.6 standard/extended or 76.8 kbaud
Bus Media	daisy chained twisted pair plus shield or Twinax; fiber with modems
Bus Termination	75, 100, 120, or 150 ohm at both ends
Modulation	frequency shift keying
Controllers Per Plc	up to 8 GBCs with CPU firmware release 5.0 or later
Cpu Firmware Minimum	release 5.0
Leds	OK and COMM OK
Operating Temperature	0 to 60 C
Humidity	5 to 90 percent non-condensing

PARAMETER	VALUE
Protection Rating	IP20
Manufacturer	GE Fanuc / Emerson
Manuals	GFK-1034 Genius Bus Controller User Manual, GFK-0356 hardware

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 to 60 C
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Humidity	5 to 90 percent non-condensing
Protection Rating	IP20
Manufacturer	GE Fanuc / Emerson
Manuals	GFK-1034 Genius Bus Controller User Manual, GFK-0356 hardware Notes From GE Fanuc Series 90-30 Genius Bus Controller User's Manual GFK-1034B specification tables and IC693BEM331 hardware descriptions. A GBC cannot shareasystem withaGCM.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications

Specifications

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Notes

From GE Fanuc Series 90-30 Genius Bus Controller User's Manual GFK-1034B specification tables and IC693BEM331 hardware descriptions. A GBC cannot shareasystem withaGCM.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: **sales@aumictech.com** · +1 (484) 841-9341

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