GE GE □□□ Series Service Manual

IS215VCMIH2C

1. Description

SPECIFICATIONS:

2. Specifications

Specification	Value
Manufacturer	General Electric
Series	Mark VI Control System
Part	Number IS215VCMIH2C
Functional	Abbreviation VCMI
Indicator	LEDs Run, Fail, Status, Reset
Instruction	Manual GEH-6421
System	Version 3 Network Version for TMR Systems
Shipping	Weight 1 lb
Product	Type VME Communication Card
Product	Type VCMI Bus Master Controller
About	the IS215VCMIH2C
The	IS215VCMIH2C is a VME Communications Board by GE for the Mark VI Turbine Control System Series.
This	series manages gas, steam, and wind turbine automated drive assemblies.
It's	a revised version (C-rated functional product revision) of the IS215VCMIH2 parent board, altering performance without aesthetic changes.
Hardware	& Functionality
Functions	as a VME Bus Master Controller, critical for system operation.
Enables	communication among I/O cards (VME backplane, expansion racks, backup/triple redundant modules) and the main processor module.
Acts	as the communication interface to the IONet system control network.
Front	faceplate features

3. Product Information

SPECIFICATIONS:

Part Number: IS215VCMIH2C

Manufacturer: General Electric

Series: Mark VI

Product Type: VME Bus Master Controller Board

Number of channels: 12

Board Type: 6U

Processor: 32-bit

Memory: Dual-port memory

Frame Rate: 10 ms

Analog output current: 0-20 mA

Size: 10.16 cm wide x 33.02 cm

Power Requirements: +5 V dc

Operating temperature: -30 to + 65 C

Size: 17.8 cm wide x 33.02 cm

Repair: 3-7 Day

Availability: In Stock

Country of Origin: United States

Manual: GEH-6421M

FUNCTIONAL DESCRIPTION:

IS215VCMIH2C is a VME Bus Master Controller Board manufactured and designed by General Electric as part of the Mark VI Series used in GE Speedtronic Control Systems. The communication link between the controller and the I/O boards, as well as the link to the IONet system control network, is provided by the VME Bus Master Controller (VCMI) board. The IDs for all the boards in the rack and their corresponding terminal boards are managed by VCMI, which is also the VME bus master in the control and I/O racks.

The IONet may link to various I/O racks, each of which has a VCMI board. Three simplex system setups using the VCMI with local and distant I/O are shown in the accompanying figure. The first example is a compact system in which all of the I/O is mounted in the VME control rack, negating the need for any additional distant I/O racks. The VCMI features three IONet ports, with one for each of the three channels (R, S, and T).

A larger system with distant I/O racks makes up the second illustration. Although many I/O racks are supported by one IONet, only one rack is displayed here. Regarding I/O boards and points, all I/O channels (R, S, and T) are identical.

IS215VCMIH2C Technical Specifications

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Hardware & Functionality

Functions as a VME Bus Master Controller, critical for system operation.

Enables communication among I/O cards (VME backplane, expansion racks, backup/triple redundant modules) and the main processor module.

Acts as the communication interface to the IONet system control network.

Front faceplate features:

One RS-232C Serial port (D-style plug connector).

Three IONet 10Base2 Ethernet ports, each with TX/RX/CD LED indicators.

Additional LED indicators: Status, Fail, Run, and 1,2,4,8.

A reset switch (push button).

Communicates execution data with main processor modules via application software.

Criticality & Information

Critical component: Spares are advisable to prevent downtime.

Functional product number (IS215VCMIH2C) acts as a strong source of hardware info, coding for:

IS215 series tag: Special Mark VI assembly, conformal PCB coating, and other hardware traits.

C revision: Indicates functional changes.

Despite GE's copyright efforts, instructional materials are relatively available online.