GE Series 90-70 Series Service Manual

IC697CMM711

1. Description

The IC697CMM711 is a communication coprocessor module that is part of the Series 90-70 Programmable Logic Controller (PAC) series formerly manufactured by GE Fanuc Automation, now under Emerson Automation. This module has Two (2) communication ports supporting RS232 / RS422 and RS485 electrical standards. This module supports CCM, RTU, and SNP communication protocols

2. Specifications

Specification	Value
Manufacturer	**GE Fanuc**
Series	**Series 90-70**
Manufacturer	**GE Fanuc / Emerson Automation**
Product	**Description Genius communication module**
Part	**Number IC697CMM711**
Series	**Series 90-70**
Slot	**width Single slot**
Product	**Type Communications Coprocessor Module**
Part	**Number IC697CMM711**
Mounting	**location Series 90-70 CPU baseplate**
RTU	**Modbus Communication Protocol Supported (Slave Only)**
Product	**Description Communications Coprocessor Module**
Microprocessor:	**12 MHz, 80C186 Microprocessor**
CCM	**Protocol Supported (Master, Slave, and Peer)**
Supported	**Protocols SNP/SNP-X Protocol in master and slave; CCM Protocol in master, slave, and peer mode; RTU Modbus slave Protocol**
Status	**LED indicators Module OK; PORT1; PORT2**
SNP	**and SNPX Communication Protocol Supported (Master and Slave)**
Communication	**interfaces Two (2) RS-422/RS-485 or RS-232**
Connection	**standard: RS232 / RS422**
Number	**of Slots 1**
Communication	**speed 9.6 Kbps, or 19.2 Kbps**
Port	**connections 25-pin D-shell, female ports**
Battery	**None required**
LED	**indicators**

3. Product Information

The IC697CMM711 is a communication coprocessor module that is part of the Series 90-70 Programmable Logic Controller (PAC) series formerly manufactured by GE Fanuc Automation, now under Emerson Automation. This module has Two (2) communication ports supporting RS232 / RS422 and RS485 electrical standards. This module supports CCM, RTU, and SNP communication protocols

Technical specifications for IC697CMM711

Manufacturer GE Fanuc

Series Series 90-70

Manufacturer GE Fanuc / Emerson Automation

Product Description Genius communication module

Part Number IC697CMM711

Series Series 90-70

Slot width Single slot

Product Type Communications Coprocessor Module

Part Number IC697CMM711

Mounting location Series 90-70 CPU baseplate

RTU Modbus Communication Protocol Supported (Slave Only)

Product Description Communications Coprocessor Module

Microprocessor: 12 MHz, 80C186 Microprocessor

CCM Protocol Supported (Master, Slave, and Peer)

Supported Protocols SNP/SNP-X Protocol in master and slave; CCM Protocol in master, slave, and peer mode; RTU Modbus slave Protocol

Status LED indicators Module OK; PORT1; PORT2

SNP and SNPX Communication Protocol Supported (Master and Slave)

Communication interfaces Two (2) RS-422/RS-485 or RS-232

Connection standard: RS232 / RS422

Number of Slots 1

Communication speed 9.6 Kbps, or 19.2 Kbps

Port connections 25-pin D-shell, female ports

Battery None required

LED indicators OK; PORT1; PORT2

Supported protocols: SNP/SNP-X Protocol (master, slave); CCM Protocol (master, slave, peer); RTU Modbus Protocol (slave only

Number of Serial Ports 2

Processor 12 Mhz, 80C186 Microprocessor

Communication speed 300, 600, 1200, 240, 4800, 9600 and 19200 Baud rate

Pushbutton control Communication re-initialize

Backplane current draw 700 mA at 5VDC

Current Required from +5V backplane bus 0.7 amps

Product Lifecycle Status Discontinued

Module Width Single-slot

Product lifecycle Discontinued / Obsolete

The IC697CMM711 is a communication coprocessor module that is included in the Series 90-70 Product line of Programmable Logic Controller (PLC). This component is a single-slot module that supports CCM, MODBUS RTU, and SNP protocols allowing I/O data exchange over a multi-drop communication network. Specifically, this module supports SNP/SNP-X Protocol (master, slave), CCM Protocol (master, slave, peer), and RTU Modbus Protocol (slave only). Possible port combinations include CCM/CCM, CCM/RTU, RTU/CCM, RTU/RTU, SNP/SNP, SNP/CCM, CCM/SNP, SNP/RTU, and RTU/SNP. The IC697CMM711 is formerly manufactured by GE Fanuc Automation, not under Emerson Automation. It is installed with a dedicated 12 Mhz, 80C186 Microprocessor. Configuration is accomplished through the MS-DOS or Windows programming software such as programming software include Logicmaster 90-70, VersaPro Professional edition, and Proficy Machine Edition Logic Developer PLC Professional edition. The IC697CMM711 interface ports are 25-pin D-shell connectors that are individually configurable. It is also provided with Three (3) LED status indicators such as Module OK, Port 1, and Port 2 and a pushbutton switch that is used to re-initialize module communication. The battery is not required by this module and operation is dictated by the software configuration downloaded. No switch or jumper settings are needed to configure. The supported communication speeds include 300, 600, 1200, 240, 4800, 9600, and 19200 Baud rates. When installing the IC697CMM711, power must be removed from the baseplate. This prevents damage to the module itself and nearby electronic components due to arcing. This module has a backplane current draw of 700 mA at 5VDC bus voltage and is compatible with VME standard C.1.

The IC697CMM711 module from GE Fanuc is an industrial communications coprocessor module, also known as a CCM. It is part of GE Fanuc’s Series 90-70 product line of programmable logic controllers or PLC components and accessories. The communication protocols that the IC697CMM711 communication coprocessor module can support are the master, slave, and peer-to-peer CCM protocols, the master and slave SNP and SNPX protocols, and the slave RTU Modbus communication protocol. The module comes with 1 slot and a pushbutton for resetting. It does not need a battery. The IC697CMM711 module does not need jumpers or switches for configuration. Instead, it can be configured with the soft switch configuration method. This communications coprocessor module comes with 2 serial ports that can be RS-232 or RS-422/RS-485 serial ports. The GE Fanuc Series 90-70 IC697CMM711 communications coprocessor module uses an 80C186 Microprocessor that operates at a rate of 12 Mhz. It is possible to install more than 1 communications coprocessor module in a single programmable logic controller system to maximize the controller system’s communication options. The IC697CMM711 module and all the other CCMs in the PLC system communicate with the PLC’s CPU through the backplane. There are 3 LEDs on this module. One of the LEDs shows the current condition of the module while the other 2 LEDs show the activity of the module’s 2 serial ports. The port LEDs are labeled as the Port 1 LED and the Port 2 LED. This module is made to be installed in a rack, and it should only be installed when the rack power is disconnected.