GE Service Manual

IC755CBS15CDA

1. Description

The IC755CBS15CDA is a QuickPanel+ Operator terminal with blank bezel. It is part of the Visualization product catalog that is manufactured by Emerson Automation, formerly by GE Intelligent Platforms (GE IP). It functions as a Human Machine Interface (HMI), featuring an embedded display measuring 15-inch Standard TFT LCD screen with resolution of 1024 x 768 pixels (XGA). It comes with a projected capacitive touchscreen and Two (2) point multi-touch operator interface; It has a Intel Freescale i.

2. Specifications

Specification	Value
Manufacturer	**GE Fanuc Emerson**
Product	**Type Quickpanel+ terminal**
Product	**Line Quickpanel**
Part	**Number IC755CBS15CDA**
Weight	**20.00 lbs (9.07 kg)**
Processor	**ARM Cortex A8**
Processor	**Speed 1 Gigahertz**
RAM	**1 Gigabyte**
Display	**Resolution 1024 x 768 SVGA**
Clock	**Speed 1GHz**
Display	**Size 15 inches**
Display	**Type Projected Capacitive Display**
Ethernet	**Ports 2**
Operator	**Input Multi-touch**
Resolution	**1024 x 768 pixels**
Serial	**Ports 2**
Integral	**Memory 1 GB SDRAM; 512 MB SLC NAND FLASH; 512 KB Battery Backed SDRAM**
Input	**Type Touch**
USB	**Ports USB Host: Two (2) USB 2.0 (Type-A) USB Device: USB 2.0 (Mini Type-B)**
Communication	**Interface Two (2) Ethernet interface; One (1) RS232; One (1) RS485;**
Terminal	**memory 1 GB DDR3 SDRAM; 512 MB SLC NAND ROM; 512 KB SRAM**
Communication	**ports Two (2) Ethernet; One (1) RS232 UART One (1) RS232/ RS485**
Operating	**System (OS) Windows CE Operating System version 7**
Two	**(2) Ethernet; One (1) RS232 UART One (1) RS323 / RS485 Removable storage slot:**
Power	**Supply 12 / 24 VDC**
1x	**SD/SDHC card sl**

3. Product Information

The IC755CBS15CDA is a QuickPanel+ Operator terminal with blank bezel. It is part of the Visualization product catalog that is manufactured by Emerson Automation, formerly by GE Intelligent Platforms (GE IP). It functions as a Human Machine Interface (HMI), featuring an embedded display measuring 15-inch Standard TFT LCD screen with resolution of 1024 x 768 pixels (XGA). It comes with a projected capacitive touchscreen and Two (2) point multi-touch operator interface; It has a Intel Freescale i.MX535 1 GHz ARM Cortex A8 processor and integrated memory that is comprised of 1 GB DDR3 SDRAM; 512 MB SLC NAND ROM and 512 KB SRAM. For communication, this device has One (1) Ethernet, One (1) RS232 UART and One (1) RS232 / RS45 communication ports. This terminal operates at an input supply voltage of 24 VDC.

Technical specifications for IC755CBS15CDA

Manufacturer GE Fanuc Emerson

Product Type Quickpanel+ terminal

Product Line Quickpanel

Part Number IC755CBS15CDA

Weight 20.00 lbs (9.07 kg)

Processor ARM Cortex A8

Processor Speed 1 Gigahertz

RAM 1 Gigabyte

Display Resolution 1024 x 768 SVGA

Clock Speed 1GHz

Display Size 15 inches

Display Type Projected Capacitive Display

Ethernet Ports 2

Operator Input Multi-touch

Resolution 1024 x 768 pixels

Serial Ports 2

Integral Memory 1 GB SDRAM; 512 MB SLC NAND FLASH; 512 KB Battery Backed SDRAM

Input Type Touch

USB Ports USB Host: Two (2) USB 2.0 (Type-A) USB Device: USB 2.0 (Mini Type-B)

Communication Interface Two (2) Ethernet interface; One (1) RS232; One (1) RS485;

Terminal memory 1 GB DDR3 SDRAM; 512 MB SLC NAND ROM; 512 KB SRAM

Communication ports Two (2) Ethernet; One (1) RS232 UART One (1) RS232/ RS485

Operating System (OS) Windows CE Operating System version 7

Two (2) Ethernet; One (1) RS232 UART One (1) RS323 / RS485 Removable storage slot:

Power Supply 12 / 24 VDC

1x SD/SDHC card slot Operating System

Status Indicators Tri-color LED (Amber/Green/Red); On-board Buzzer

Windows Compact Embedded 7 Bezel Type

Functionalities HMI; PLC; Process controller; Data Historian; Gateway

Blank Bezel Supply Voltage

Programming languages Ladder Diagram (LD); Function Block Diagram (FBD); Structured Text (ST); Instruction List (IL); Sequential Function Chart (SFC)

24 VDC

Bezel Blank Bezel

Description

The IC755CBS15CDA is an Emerson Automation QuickPanel+ operator terminal. Formerly manufactured by GE Intelligent Platforms (GE IP), this Human Machine Interface (HMI) device features a 15-inch, standard TFT-LCD screen with resolution of 1024 x 768 in XGA video format. With a colored display screen, this terminal can be configured to implement color coded animation and status display. With a large screen, tis operator terminal is ideal for use in large applications that require a more complex representation of the controlled process or machine. The IC755CBS15CDA is designed with a blank bezel which allow Original Equipment Manufacturers (OEM) to custom design and promote own company branding. With a blank bezel, OEMs may embed their company name and logo to the HMI device. Aside from a blank bezel, other equally important specifications of the IC755CBS15CDA includes a projected capacitive touchscreen and Two (2) point multi-touch operator interface; An Intel Freescale i.MX535 1 GHz ARM Cortex A8 processor; Integrated memory that is comprised of 1 GB DDR3 SDRAM; 512 MB SLC NAND ROM and 512 KB SRAM. For communication with partner Programmable Logic Controllers (PLC), this device has an Two (2) 10100 mbps Fast Ethernet ports at maximum distance of 100 meters per segment, One (1) RS232 UART and One (1) RS232 / RS45 communication ports that can be used for point-to-point (up to 15 meters) and daisy-chain network topologies (up to 1 km cable distances). To operate this HMI device, input supply voltage of 24 VDC must be terminated to the supply terminals of the IC755CBS15CDA.

The IC755CBS15CDA terminal is an industrial operator terminal which is part of the Quickpanel+ series from GE Fanuc. The IC755CBS15CDA terminal uses a 1 Gigahertz Freescale i.MS535 microprocessor which is based on ARM Cortex A8 technology. This microprocessor comes with a floating point coprocessor, a NEON SIMD media accelerator, a 256 KB Level 2 cache, a 32 KB Level 1 cache, and a 2D/3D graphics processing unit. The IC755CBS15CDA terminal system includes multiple memory types, including battery-backed SRAM, NAND flash, and RAM. The RAM is 1 GB SDRAM. The 15-inch touchscreen display on the IC755CBS15CDA terminal acts as the primary means of operator input and it supports SVGA resolution (1024 x 768) and multi-touch control. The communication options on the IC755CBS15CDA terminal include 2 Fast Ethernet ports with an RJ-45 interface, 2 serial ports, and 3 USB ports. The external dimensions of the IC755CBS15CDA terminal are 399 x 323 x 70 millimeters. The approximate unit weight is 4.5 kilograms. A mounting gasket and panel mounting brackets are included in the package containing the IC755CBS15CDA terminal. A cutout measuring 379 x 305 millimeters is required for the panel mounting of the terminal. The recommended working temperature range for the IC755CBS15CDA terminal is from 0 to 55 degrees Celsius. During transportation and storage, the temperature of air around the terminal should be maintained between -10 and 60 degrees Celsius. A 3-pin connector is required to provide DC power to the terminal, and the rated input voltage is 12/24 Volts DC

with +/-20% tolerance. The IC755CBS15CDA terminal complies with the ATEX, RoHS, UL Type 4X, CE, FCC Part 15 Class A, and Marine, ABS, BV, and DNV GL requirements.