

Allen-Bradley 1756 Series Service Manual

1756-CNB/B

1. Description

Mfr. Part Number:

2. Specifications

Specification	Value
Manufacturer	Rockwell Automation
Brand	Allen-Bradley
Part	Number/Catalog No. 1756-CNB
Series	ControlLogix
Module	Type Bridge Module
Maximum	Nodes 99
Maximum	Connections 64
ControlNet	Communication Rate 5 megabits-second
Configuration	Standard
Input	Current 970 milliamps at 5.1 Volts DC, 1.7 milliamps at 24 Volts DC
Thermal	Dissipation 17.4 BTU per Hour
Power	Dissipation 5.1 Watts
Slot	width 1
UPC	10612598174079
Weight	0.57 pounds (0.26 kilograms)
UNSPSC	32151705 Description
The	Allen-Bradley 1756-CNB or ControlNet Bridge module is an interface module used for interfacing a ControlLogix rack to ControlNet network. Compared to the Allen-Bradley 1756-CNBR module, the 1756-CNB is used in standard, non-redundant configuration. This module is perfect if the user applications have 40 to 48 Logix communication connections per communication module. It has a communication rate of 5 megabytes per second and it has 99 nodes available. The 1756-CNB module handles 2 things, namely the control of I/O

3. Product Information

www.oilautotech.com

Mfr. Part Number:

1756-CNB/B

Manufacturer: Allen-Bradley / Rockwell Automation

Description: Allen-Bradley 1756-CNB ControlLogix ControlNet Bridge Module, Series B

Full Description: Allen-Bradley 1756-CNB ControlLogix ControlNet Bridge Module, Series B The 1756-CNB is an Allen-Bradley communication adapter that functions as a ControlNet Bridge. It is provided with an integrated ControlNet interface such as One (1) BNC connector for non-redundant media operation and One (1) NAP (RJ-45 8-pin with shield). Technical specifications for 1756-CNB

Manufacturer Rockwell Automation

Brand Allen-Bradley

Part Number/Catalog No. 1756-CNB

Series ControlLogix

Module Type Bridge Module

Maximum Nodes 99

Maximum Connections 64

ControlNet Communication Rate 5 megabits-second

Configuration Standard

Input Current 970 milliamps at 5.1 Volts DC, 1.7 milliamps at 24 Volts DC

Thermal Dissipation 17.4 BTU per Hour

Power Dissipation 5.1 Watts

Slot width 1

UPC 10612598174079

Weight 0.57 pounds (0.26 kilograms)

UNSPSC 32151705 Description

The Allen-Bradley 1756-CNB or ControlNet Bridge module is an interface module used for interfacing a ControlLogix rack to ControlNet network. Compared to the Allen-Bradley 1756-CNBR module, the 1756-CNB is used in standard, non-redundant configuration. This module is perfect if the user applications have 40 to 48 Logix communication connections per communication module. It has a communication rate of 5 megabytes per second and it has 99 nodes available. The 1756-CNB module handles 2 things, namely the control of I/O data when it is used with a Logix5550 controller for scheduled data and for unscheduled data, bridging data between the ControlLogix backplane and the ControlNet Network. Make sure that the path information is correct in order to properly route the messages it receives.

Up to 64 bidirectional connections with other ControlNet devices can be supported by the 1756-CNB module. It can be a mix of both scheduled and unscheduled connections.

However, the number of supported connections also depends on the network configuration. If an application needs more connections, the users can add another 1756-CNB module, but they must make sure to do it in the same chassis and on the same network as the first module. It can also support up to 20 buffers for unconnected messages. It also has 2 ports - 1 ControlNet BNC port and 1 ControlNet RJ45 port. The users need to set the module's node address switches first when installing the 1756-CNB module. They can select a unique node address from 01 to 99. The users can then use the module as a standalone control module by using 1 set of modules or as a redundant control setup by using identical pairs of modules (partners). Note that when using redundant control, the node address switches should have the same node address. The 1756-CNB current draw at 5.1 Volts DC is 970 milliamps and 1.7 milliamps if the current draw is at 24 Volts DC. Its power dissipation is rated at 5.14 Watts.

The 1756-CNB is a ControlLogix Communication adapter used for interfacing any ControlLogix rack to a ControlNet data Highway. This module a single slot module with integrated communication ports of One (1) BNC connector for non-redundant media operation and One (1) NAP (RJ-45 8-pin with shield).

This ControlNet bridge is compatible with ControlNet modules from Allen-Bradley platforms such as Flex IO system, POINT IO, SLC and PLC5 ControlNet, ControlNet interface cards, encompass partner modules.

It may be used to implement Distributed I/O application where a large number of rack containing ControlLogix I/O modules are installed. It may also be used to bridge across networks of different protocols and Exchange information over ControlNet network. In a ControlNet system, connection to a single ControlNet bridge module allows a direct path to the main controller in the network where program modifications and tests may be executed. Also, this protocol may also be used to interface with Human Machine Interface (HMI) and Supervisory Control and Data Acquisition (SCADA) applications.

It is also capable of implementing self-diagnostics by accessing the module's online backplane connection which displays connection properties and error counters. The module's front panel is also provides with a textual display that cyclically changes to display the module name, connection status, node address and other parameters.