DIGITUS ®
Professional

Industrial Media Converter

DN-85001

DN-85002

DN-85003

DN-85004

User Manual
DN-85001 • DN-85002
DN-85003 • DN-85004

FCC MARKING

This Equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received; including interference that may cause undesired operation.

CE MARKING

This equipment complies with the requirements relating to electromagnetic compatibility, EN 55022 class A for ITE, the essential protection requirement of Council Directive 2004/108/EC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

Company has an on-going policy of upgrading its products and it may be possible that information in this document is not up-to-date. Please check with your local distributors for the latest information. No part of this document can be copied or reproduced in any form without written consent from the company.

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Key Features

- True Mini, rugged design enclosure 59x36x49mm (LxWxD)
- Supports 18V-36VAC/12V-60VDC/ or DC Jack socket
- Supports Link Fault Pass through (LFP) function
- Supports switch model and converter mode
- Surge protection diodes on power input
- ESD protection diodes on RJ-45 port
- Provides Far End Fault function on FX port
- Provides increased Noise Immunity
- Extended environmental specification -40°C to 75°C

Introduction

This true mini, rugged Industrial media converter is designed for where critical but space-limited installations. It can be powered by wide range of VAC, VDC or external DC power adapter. With its multi-purpose design, it can also be used for DIN-Rail or wall-mounted. It is an ideal unit for IP surveillance, traffic monitoring and Security application in critical environment. It can tolerate -40°C to 75°C in harsh environment to perform a reliable network.
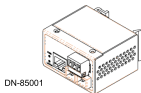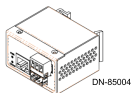
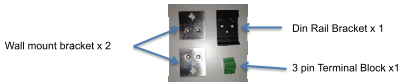## Housing Dimension
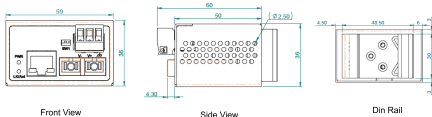
Front View

Side View

Din Rail

DN-85001

DN-85004

Installation package

This unit can be installed by DIN-rail mounted or wall-mounted. DIN-rail brackets and wall-mounted bracket are included.

Wall mount bracket x 2

Din Rail Bracket x 1

3 pin Terminal Block x1

Power connection

This unit provides 3 pin terminal block. And it can be operated using either VAC or VDC power source. The VDC power range is from 12VDC to 60VDC, and the VAC power range is from 18VAC to 36VAC. Always make sure your input voltage is within this supported voltage range.

WARNING – any exceeded input voltage will not make this unit function and may damage this unit.

To make power connection – Follow the printed polarity for V+, V-, Ground. Connect positive wire to V+, connect negative wire to V-, also connect neutral wire to ground.

Connecting procedure

STEP 1 –
Pull out 3 pin terminal block.
STEP 2 –
connect wire to V+, V-, and Ground
STEP 3 –
Connect SFP fiber connector or SC fiber wire to fiber port.
STEP 4 – plug back 3 pin terminal block to its place.

WARNING -- Always pull out terminal block to connect power wire.
DO NOT force SFP fiber into SFP housing without removing terminal block.

Dip switch function

This unit is equipped with dip switches, located on the front panel marked as SW1. Adjusting the dip switches will change the default function of this unit. This unit has set to manufacturer default as: switch mode and LFP function off.

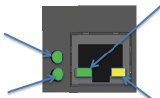The table shown as you may change the dip switch setting to your desired environment.

SW1

DIP 1	ON	Converter mode
	OFF	Switch mode (default)
DIP 2	ON	LFP function enabled
	OFF	LFP function disabled (default)

LED indicator

Power-
ON -- Power is detected

Fiber port Link/Active
ON --fiber is detected.
Flashing -- data is transmitting / receiving

Green –
ON—TX link is detected
Flashing – TX data is transmitting / receiving

Amber
ON - 100M speed is detected.
OFF – 10M speed is detected

Models Available:

DN-85001 --- MM SC
DN-85003 --- MM ST
DN-85002 ---SM fiber 30km
DN-85004 --- SFP Fiber

Specification:

IEEE Standard	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3u 100Base-FX Fast Ethernet IEEE802.3x Flow Control and Back Pressure
Data Processing	Store and Forward
Flow Control:	IEEE 802.3x Flow Control and Back Pressure
Architecture	Full wire speed conversion, Transparent conversion to 802.1Q VLAN tagged packets
MAC address Table Size	1K
Packet Buffer Size	1Mbits
Network Connector :	RJ-45 10/100M BaseT(X) Auto negotiation, Auto MDI/MDI-X function, Full/Half duplex Fiber ports: 100BaseFX SC, ST, SC SM 30km, SFP 100BaseX
LED indicators	Power, Speed, Link/Act Speed (TP port) Link/Act(TP and Fiber port)
DIP Switch	Link Fault Pass Through (LFP) Converter Mode, Switch Mode
Power protection	Surge protection diodes on power input
Connector protection	ESD protection diodes on TX port
Reserve polarity protection	Present
Overload current protection	Present
Power Input	18V-36VAC, 12V-60VDC, DC Jack terminal cable supported (DC Barrel Connector)
Conformance to UL Standards	Use Isolated power supply to conform with UL 508 standard
Power Consumption	1.44Watts
Removable Terminal Block	3 pin contact terminal block for power input
Operating Temperature	-40℃~75℃
Operating Humidity	5% to 95% (Non-condensing)
Storage Temperature	-40℃~85℃
Housing Design	IP40 Design, high graded Aluminum
Case Dimension (W X D X H)	59x36x49mm (LxWxD)
Installation	DIN Rail mounted, Panel Mounted,
EMC/EMS	CE, FCC

EMI	FCC Part 15 Subpart B Class A, CE EN 55022 Class A
EMS	EN61000-4-2 (ESD) Level 3
	EN61000-4-3 (RS) Level 2
	EN61000-4-4 (EFT) Level 2
	EN61000-4-5 (Surge) Level 2
	EN61000-4-6 (CS) Level 2
	EN 61000-4-8 (PFMF) Level 1
Safety	UL508 (Pending)
Rail Traffic	EN 50121-4 (Pending)
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6
Environmental	RoHS, REACH