DDNG485

RS-485/DMX512 Gateway

Flexible network communications gateway

The Philips Dynalite DDNG485 is a flexible network communications bridge designed for RS-485 networks. The two optically isolated RS-485 ports enable the DDNG485 to implement a trunk and spur topology on large project sites, with the bridge providing a high-speed backbone optically coupled to many lower-speed spurs.

DDNG485

Flexible network communications gateway

- **Route DyNet to third-party systems** – Such as audio-visual, Modbus meters, and building automation systems, providing an integrated approach to total building control and energy management.

- **DMX512 mode** – Transmit or receive up to 512 channels of DMX with automatic DyNet conversion and task triggering. Provides temporary control of house lights from the DMX console in an auditorium scenario.

- **Electrical fault isolation** – Faults can be isolated to individual network spurs.

- **Internal controls** – Programmable logic controller capable of comprehensive conditional and sequential logic and arithmetic function processing, packet filtering, and DyNet to DyNet 2 translation.

- **Flexible mounting solution** – DIN rail mountable, designed to be installed into a distribution board or other electrical enclosure.

Dimensions

105 mm (4.13 in)
95 mm (3.74 in)
108 mm (4.25 in)
64 mm (2.52 in)
68 mm (2.68 in)
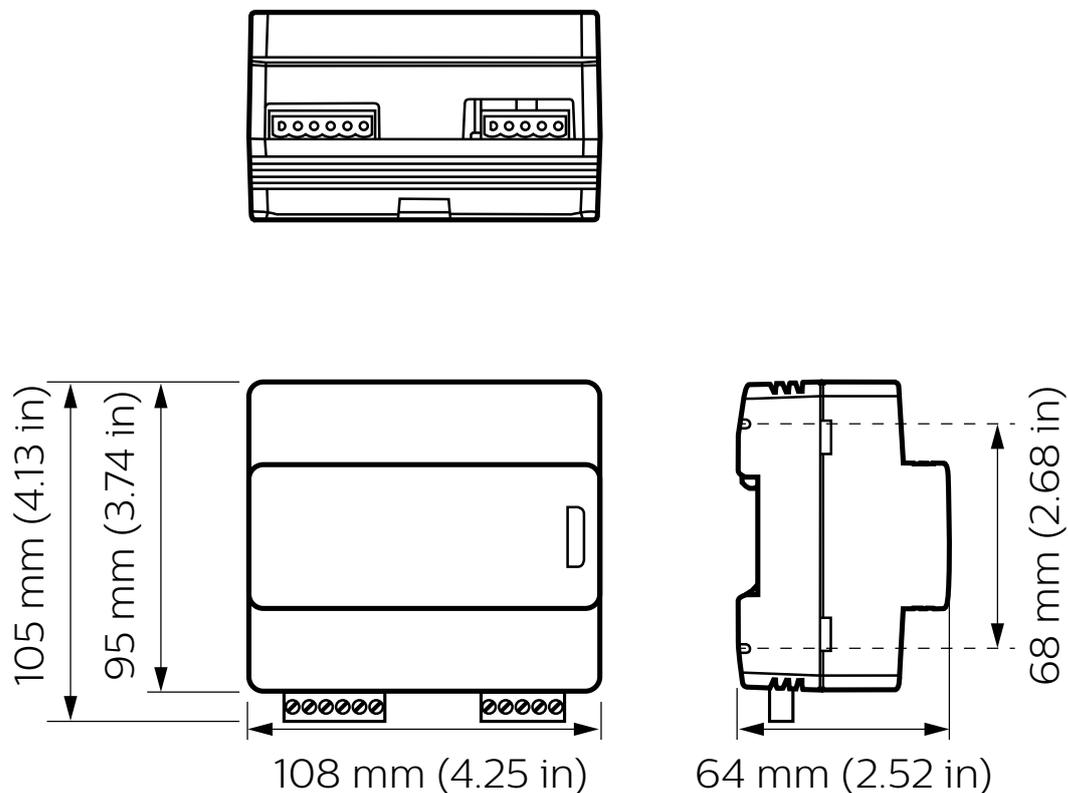
Specifications

Due to continuous improvements and innovations, specifications may change without notice.

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Electrical

Supply Voltage (DyNet Port 1)	12-24 VDC
	SELV / Class 2 (UL)
Supply Current	70 mA + (1.6 x DyNet Port 2 load current) @ 12 VDC
	60 mA + (0.7 x DyNet Port 2 load current) @ 24 VDC
Serial Port Isolation	Optical (3.75 kV RMS)
Output Voltage (DyNet Port 2)	12 VDC
Output Current	200 mA (max)
	SELV / Class 2 (UL)
IEC Overvoltage Category	III

Control

Communication Ports	**Port 1:** RS-485 (9,600- 115,200 bps)
	Port 2: RS-485 (9,600- 250,000 bps)
Supported Protocols	**Port 1:** DyNet
	Port 2: DyNet, DMX, Modbus
DMX Tx/Rx Channels	512
Dry Contact Inputs	1 x AUX
	SELV / Class 2 (UL)
User Controls	1 x service switch
Indicators	1 x service LED
Diagnostic Functions	Device online/offline status

Physical

Dimensions (H x W x D)	95 x 108 x 64 mm (3.74 x 4.25 x 2.52 in)
Packed Weight	0.22 kg (0.49 lb)
Construction	G3.1-style plastic DIN rail enclosure (6 unit)
Communication Ports	1 × 6-way pluggable screw terminal
	1 × 5-way pluggable screw terminal
Communication Terminal Conductor Size	0.3 - 2.5 mm² (22 - 12 AWG)

Environment*

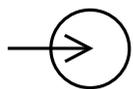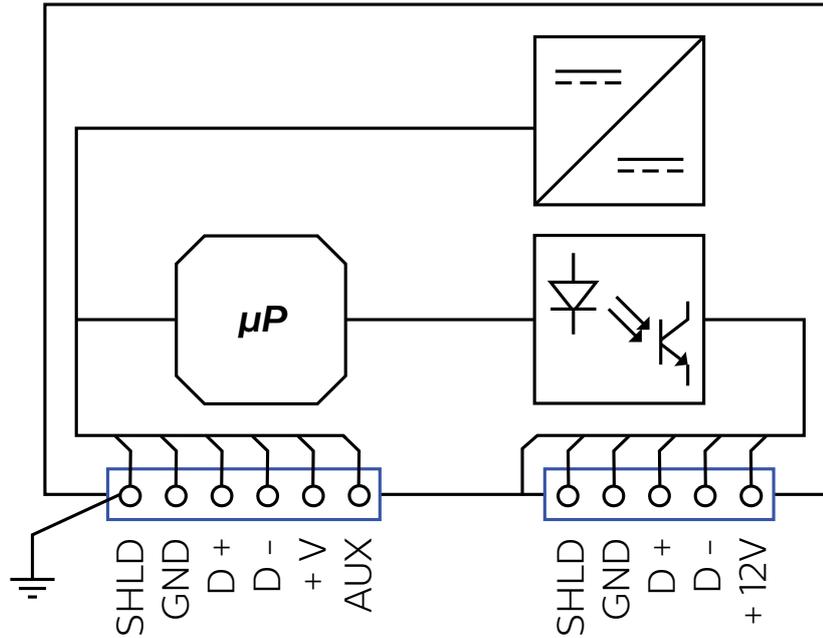|	
Operating Temperature	0° to 50°C ambient (32° to 122°F)
Storage/Transport Temperature	-25° to 70°C ambient (-13° to 158°F)
Relative Humidity	0 to 90% non-condensing
IEC Pollution Degree	II

Compliance

Certification	CE, RCM, UL/cUL, FCC, ICES, UKCA, RoHS

* Install in a dry indoor well-ventilated location only
Minimum 45 mm top and bottom clearance

Electrical

70 mA +(1.6 x DyNet Port 2 load current) @ 12 V $=$

60 mA +(0.7 x DyNet Port 2 load current) @ 24 V $=$

12 V $=$ 200 mA

SELV/Class 2 (UL)

Ordering Code

Product	Philips 12NC
DDNG485	913703366709