PHILIPS
dynalite

DDNG485

RS-485/DMX512 Gateway


# 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.

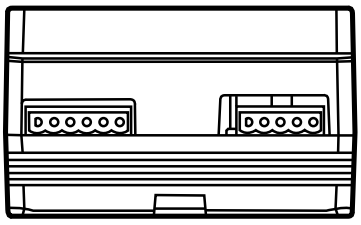
# DDNG485

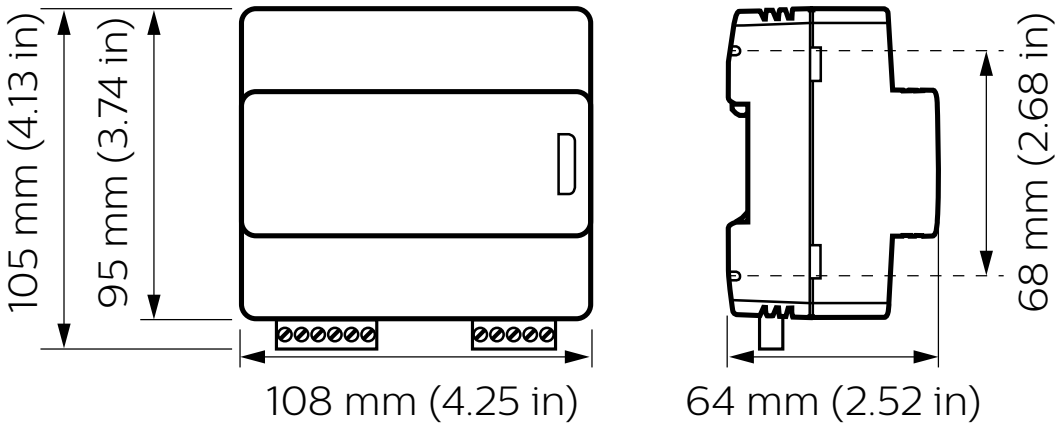
## Flexible network communications gateway

- **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.

* The DDNG485 supports a maximum of 32 DyNet presets.

## Dimensions





# Specifications

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

**DDNG485**
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## Electrical

| | |
|---|---|
| Supply Voltage (DyNet Port 1) | 12-24 VDC<br>SELV / Class 2 (UL) |
| Supply Current | 70 mA + (1.6 x DyNet Port 2 load current) @ 12 VDC<br>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)<br>SELV / Class 2 (UL) |
| IEC Overvoltage Category | III |

## Control

| | |
|---|---|
| Communication Ports | **Port 1:** RS-485 (600- 115,200 bps)<br>**Port 2:** RS-485 (600- 250,000 bps) |
| Supported Protocols | **Port 1:** DyNet<br>**Port 2:** DyNet, DMX, Modbus |
| DyNet Presets | 32 |
| DMX Tx/Rx Channels | 512 |
| Dry Contact Inputs | 1 x AUX<br>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 x 6-way pluggable screw terminal<br>1 x 5-way pluggable screw terminal |
| Communication Terminal Conductor Size | 0.3 - 2.5 $mm^2$ (22 - 12 AWG) |

## Environment*

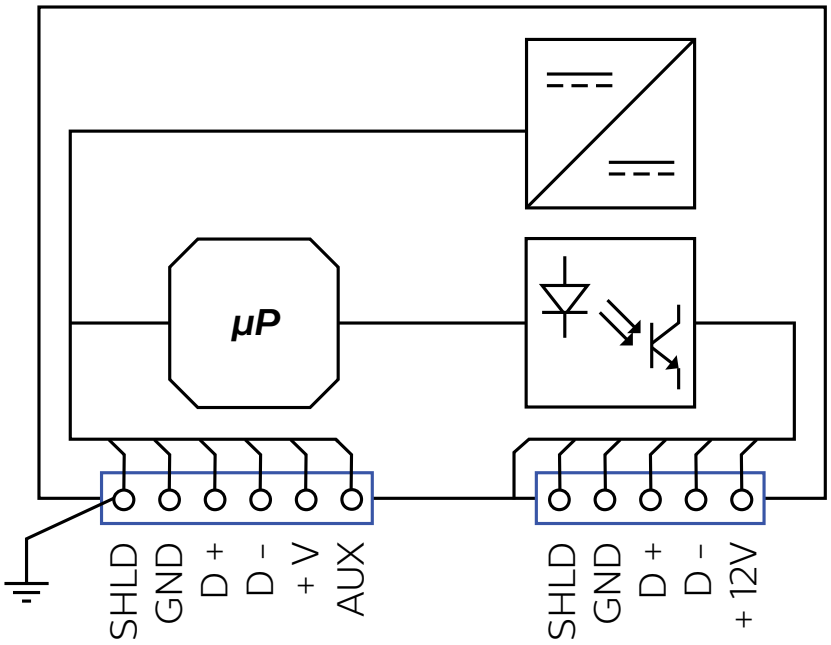
| | |
|---|---|
| Operating Temperature | 0° to 50°C ambient (32° to 122°F) |
| Storage/Transport Temperature | -25° to 70°C ambient (-13° to 158°F) |
| Relative Humidity | 0 to 90% non-condensing |
| IEC Pollution Degree | II |

## 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 |