DDNG485

RS-485/DMX512 Gateway

Specification Sheet

Gateways > Network Gateways

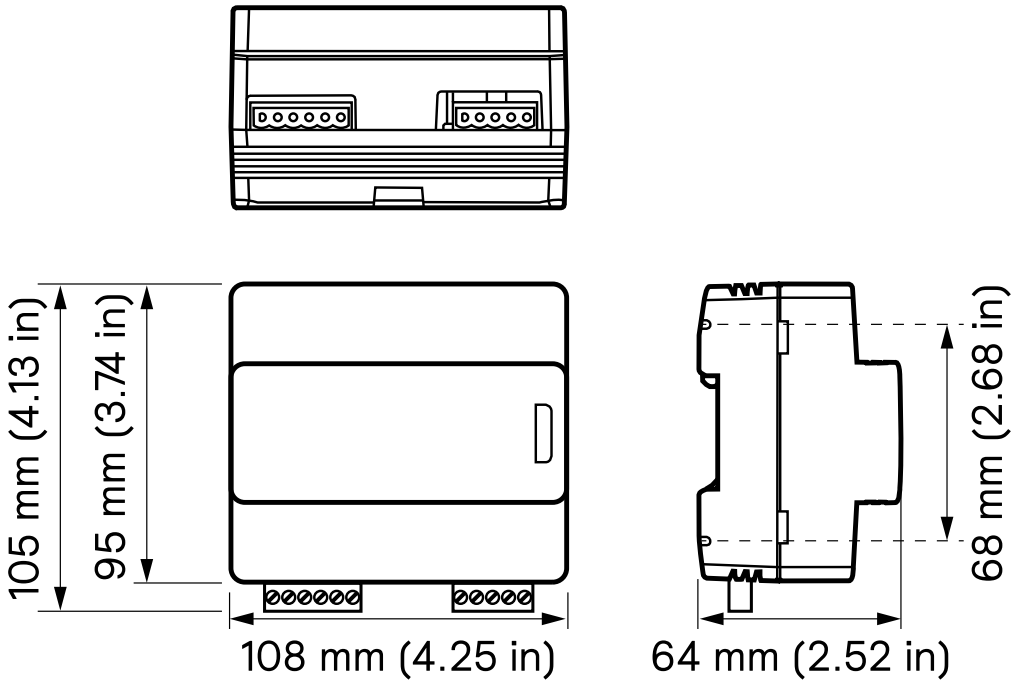
Flexible network communications gateway

The 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.

Key Features

- **Route DyNet to third-party systems** – Integrate audio-visual equipment, Modbus meters, and building automation systems for a unified approach to 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.
- **Programmable Logic Controller (PLC)** – Supports comprehensive conditional and sequential logic, arithmetic function processing, packet filtering, and DyNet-to-DyNet2 translation.
  (**NOTE:** The DDNG485 supports a maximum of 32 DyNet presets)
- **Flexible mounting** – DIN rail mounting clips designed for installation into a distribution board or electrical enclosure.

Dimensions



Specifications

Electrical

Supply Voltage	**DyNet Port 1:** 12–24 VDC SELV / Class 2 (UL)
Supply Current	70 mA @ 12 VDC (+1.6 x DyNet Port 2 load current) 60 mA @ 24 VDC (+0.7 x DyNet Port 2 load current)
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 (600–115,200 bps) **Port 2:** RS-485 (600–250,000 bps)
Supported Protocols	**Port 1:** DyNet **Port 2:** DyNet, DMX, Modbus
DyNet Presets	32
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	95 x 108 x 64 mm (3.74 x 4.25 x 2.52 in)
Packed Weight	0.22 kg (0.49 lb)
Construction	Polycarbonate DIN rail enclosure (6 unit)
Communication Ports	1 x 6-way pluggable screw terminal 1 x 5-way pluggable screw terminal
Terminal Conductor Size	0.3–2.5 mm² (#22–12 AWG)

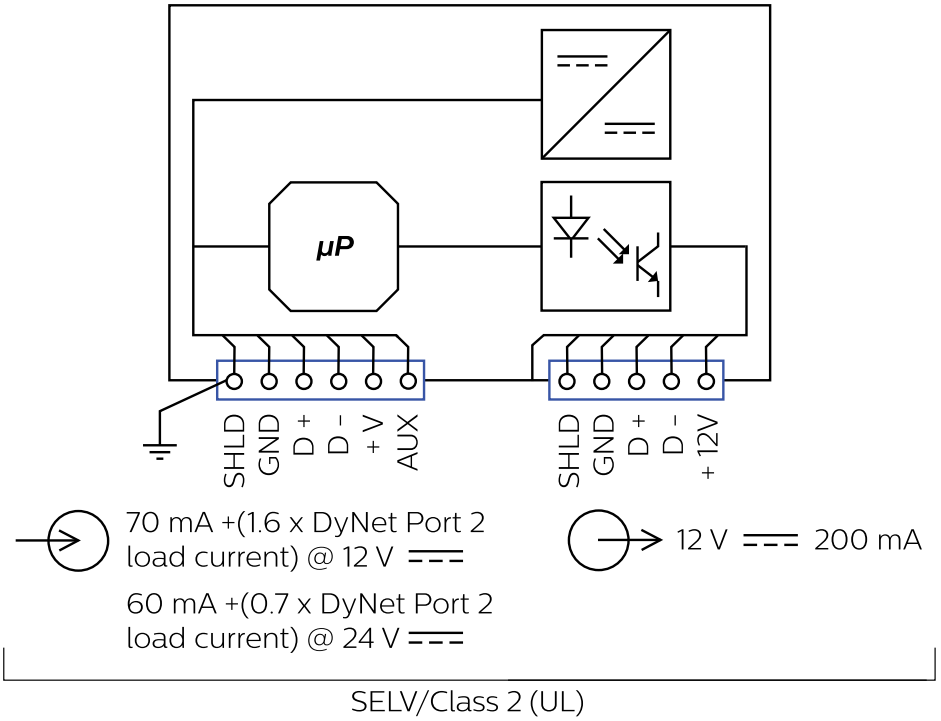
Environment

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	≤90% non-condensing
IEC Pollution Degree	II
Installation Note	Install in a dry indoor well-ventilated location only Minimum 45 mm top and bottom clearance

Compliance

Certifications	CE, RCM, UL/cUL, FCC, ISED, UKCA, RoHS

Electrical Drawing



Ordering Codes

Product	12NC
DDNG485	913703366709