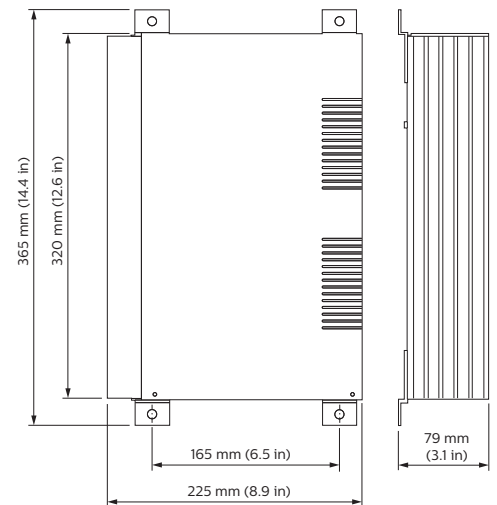# DNG485 RS-485 / DMX512 Gateway

Flexible network communications bridge

The Philips Dynalite DNG485 is a flexible
network communications bridge designed for
RS-485 networks. The two opto-isolated RS-485
ports enable the DNG485 to implement a trunk
and spur topology on large project sites, with
the bridge providing a high-speed backbone
opto-coupled to many lower speed spurs.

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

- Increased network security — Definition of
  packet filtering rules for each direction provides
  augmented security and robustness.

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

- DMX512 mode — Transmit or receive up
  to 64 channels of DMX512, with automatic
  DyNet conversion and task triggering.

- Internal controls — Including programmable
  logic controller capable of comprehensive
  conditional and sequential logic and
  arithmetic function processing, packet filtering
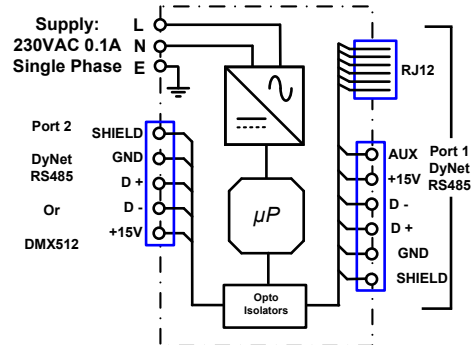 and DyNet to DyNet II translation.

365 mm (14.4 in)

320 mm (12.6 in)

165 mm (6.5 in)

225 mm (8.9 in)

79 mm
(3.1 in)

For detailed product information, please
refer to the product information pages at
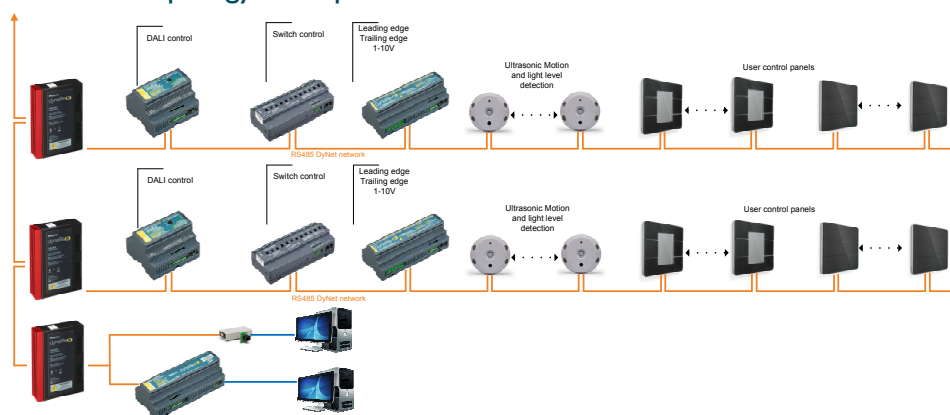www.philips.com/dynalite and follow the links.

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dynalite

Specifications

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

Item	Specification	Details
Electrical	Input Voltage	230 VAC ±14% 50 / 60 Hz Single Phase @ 0.25 A
	DyNet DC Supply	Serial Port 1: 12 V @ 450 mA (supply for approx 20 user interfaces) Serial Port 2: 12 V @ 180 mA (supply for approx 9 user interfaces)
Control	Control Ports	Two RS-485 DyNet serial ports
	Serial Port Isolation	3.75 KV RMS optical isolation between ports
	User Controls	Service switch Diagnostic LED
	Internal Controls	Programmable Logic Controller Packet filtering DyNet to DyNet II translation
	DMX512 Support	DMX512 Receive: 64 channels DMX512 Transmit: 64 channels
	Diagnostic Functions	Device Online/Offline status
Physical	Supply Terminals	Line, Neutral 1 x 4 mm² max conductor size Earth link bar provided
	Serial Port Terminals	Serial Port 1: SHLD, GND, D+, D-, +12 V 1 x 2.5 mm² max conductor size Serial Port 2: SHLD, GND, D+, D-, +12 V 1 x 2.5 mm² max conductor size 1 x RJ12 socket for plug in connection
	Dimensions (H x W x D)	320 mm x 225 mm x 79 mm (12.6" x 8.9" x 3.1")
	Packed Weight	3.1 kg
	Construction	Alloy / Steel wall mount case with epoxy finish
	Operating Conditions	Temperature: 0 to 50° C ambient Humdity: 0 to 95% non-condensing
	Storage & Transport	Temperature: -25 to 60° C ambient Humidity: 0 to 90% non-condensing
Certification	Certification	CE, C-Tick
Options & Ordering	Standard Product	DNG485 (Philips 12NC - 913703082209)

Electrical Diagram

Network Topology Example