Dupline® Carpark Master Generator



Description

The Carpark master generator SBP2MCG324 is part of the Dupline® carpark system and works only together with the Carpark controller SBP2WEB24. The SBP2MCG324 is a channel generator that generates the Dupline® 3-wire carrier signal with power and communication for the connected sensors and indicators.

Each Carpark master generator can have up to 90 Carpark sensors connected, with max. 50 sensors in one line. Additional Dupline[®] smart building modules such as PIR detectors, light switches, relay modules and DALI dimmers can be connected to the same Dupline[®] bus.

Up to 7 MCG SBP2MCG324 can be connected to a carpark controller SBP2WEB24.



Parking Guidance Systems

Main functions

· Generates the Dupline® 3-wire carrier signal with power and communication for sensors and indicators.



Benefits

- Generates the Dupline[®] 3-wire bus with 28 VDC power and communication
- Operates in conjunction with the Carpark controller SBP2WEB24
- Load Current up to 2.6 Amp
- Connect up to 90 Carpark sensors via Dupline[®] 3-wire bus
- Up to 50 sensors in one line
- Powered from 28 VDC



Features



Power Supply

Rated operational voltage	28 VDC (±20%), 2.6 A (with max. load), CL.2		
Rated impulse voltage	500 V (1.2/50µs) (IEC 60664-1, tab. F.1)		
Rated operational power	3 W		
Reverse-polarity protection	Yes		
Connection	A1 (+) and A2 (-)		
Power-ON delay	Typical 4 s		
Power-OFF delay	1 s		
Voltage output	POW out	Nominal: 28 VDC ±20%	

Note: No galvanic separation between power supply A1 + A2 and power out. Use always separate power supplies for each MCG SBP2MCG324.

Dupline® specifications

Dupline [®] voltage rated	8.2 V
Maximum Dupline [®] voltage	10 V
Min. Dupline [®] peak voltage	4.5 V
Maximum Dupline [®] current	130 mA, CL.2
Maximum current on pow	2.6 A
Terminal	D+, D- and pow out

Note: The Dupline[®] bus is located on the upper connector and also on the local bus connector on the right side of the module.

LEDs indication

Green LED	Power status	ON: supply ON OFF: supply OFF
Yellow LED	Dupline [®] bus	ON: the Dupline [®] bus is working properly Flashing: there is a fault on the Dupline [®] bus OFF: the Dupline [®] bus is OFF or not connected.
	Bus	OFF: no communication is present on the HS bus ON: communication error on HS bus Flashing: communication OK on HS bus

Environmental

Ambient temperature	-20° +50°C (-4° +122°F)	Operating
	-50° +85°C (-58° +185°F)	Storage
Degree of protection	Front	IP50
	Screw terminal	IP20
Pollution degree	2	IEC 60664-1, par. 4.6.2
Humidity (not condensing)	20 80% RH	



EMC

Immunity	EN61000-6-2
Emission	EN61000-6-3

Fail safe condition

If the SBP2MCG324 looses the communication with the SBP2WEB24, the Dupline[®] output will be switched off. In this situation all the modules connected to the bus will go into the fail-safe output status.

HS Bus specifications

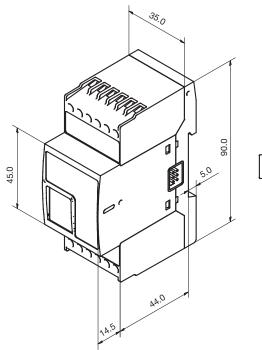
Bus type	RS485 high speed bus
Protocol	Internal proprietary protocol
Connection	By local bus (left and right connectors) or terminals GND, A(-), B(+). T1, T2: termination inputs. They have to be short-circuited on the last module of the network. See wiring diagrams.

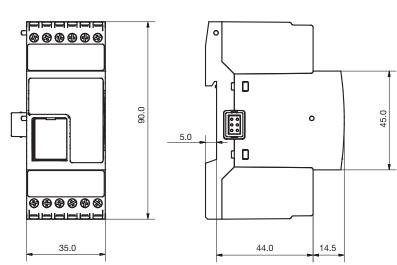


Mechanics

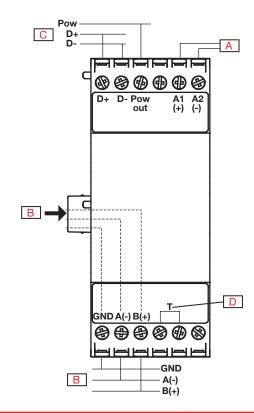
Housing

Dimensions (HxWxD)	35 x 90 x 63.5 mm (2 DIN module)
Housing material	Noryl
Weight	150 g









А	28 VDC supply IN	С	Dupline [®] Bus and 28 VDC power for 3-wire modules
В	HS Bus	D	These two terminals must be short-circuited in the last module of the network

Connection

Wiring

Terminal	12 screw-type
Cable cross-section area	Max. 1.5 mm ²
Tightening torque	0.4 Nm / 0.8 Nm

Mode of operation

The SBP2MCG324 Carpark master generator is part of the Dupline[®] Carpark system and it is always used in conjunction with the Carpark controller SBP2WEB24.

The unit generates the Dupline[®] 3-wire carrier signal with power and communication for up to 90 Carpark sensors.

Up to 7 SBP2MCG324's can be connected to one SBP2WEB24 either locally via the side connector or RS485 over longer distances.

Information regarding installation, programming and handling the SBP2MCG324 can be found in the manual for the configuration tool SBP2WEB24 or installation manual located on website: HTTP://productselection.net



Compatibility and conformity

Approvals and markings

CE-marking	CE
Approvals	c UL us

UL notes

- This product is intended to be supplied by a Listed Information Technology Equipment AC Adaptor marked NEC Class 2 or LPS
- Max ambient temperature: 40°C



References

Product selection key





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Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Carlo Gavazzi: SBP2MCG324