SBP2MCG324



Dupline® Carpark Master Generator



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

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.



Applications

Parking Guidance Systems



Main functions

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



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 | |





| 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

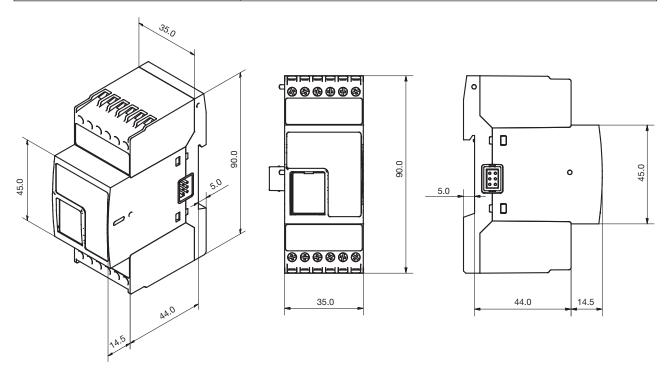
| Bus type | RS485 high speed bus | |
|------------|--|--|
| Protocol | Internal proprietary protocol | |
| Connection | By local bus (left and right connectors) or terminals GND, A(-), B(+). T1, T2: termination inputs. They have to be short-circuited on the last module of the network. See wiring diagrams.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



Mechanics

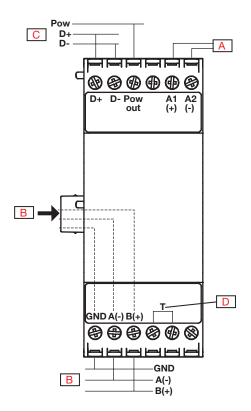
Housing

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





Wiring



| Α | 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

| 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



SBP2MCG324

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