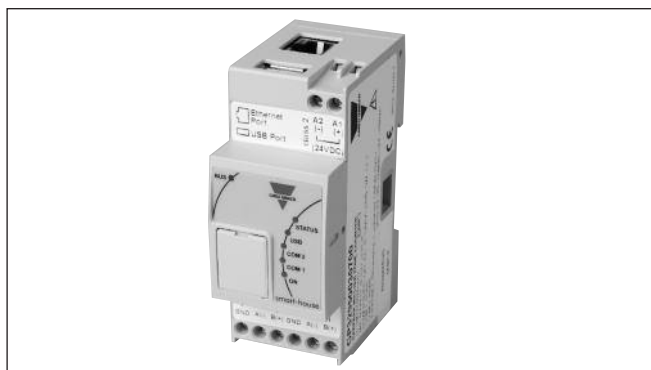


# Dupline® Carpark Master Zone Counter (MZC) Module Type GP32950030700



- Controller in the Dupline® zone counting system
- Micro Linux PC with ethernet port and web server
- Connects up to 120 count sensors via Dupline® L<sub>1</sub> 3-wire bus
- Dupline® ultrasonic carpark sensors can be used directly on the L<sub>1</sub> bus
- Loop detectors or photoelectric sensors can be used when connected to a Dupline® L<sub>1</sub> input module
- Manages up to 3840 parking spaces in multiple zones
- Each zone can have multiple entry and exit points
- Easy configuration, monitoring and count adjustment via web server
- Mixed systems with zone counting and single space detection possible
- Option to detect the split between handicap and standard spaces occupancy
- Optional PC software for real-time monitoring and historical occupancy data analysis

## Product Description

The GP32950030700 is a programmable unit specially designed for Carpark installations. This controller includes dedicated functions for counting based on the count sensors connected to the L<sub>1</sub> bus. A web server in the controller gives the user a unique opportunity to modify or

monitor the zone count system using a smartphone or other ethernet based equipment. The GP32950030700 has no independent functions and only works together with the channel generator GP32900003700.

## Ordering Key

**GP32950030700**

## Type Selection

### Housing

2 DIN

### Mounting

DIN-rail

### Supply: 24 VDC ± 20%

GP32950030700

## Supply Specifications

### Power supply

Rated operational voltage

### Rated impulse voltage

### Rated operational power

Overvoltage cat. II  
(IEC 60664-1, par. 4.3.3.2)  
15 to 24 VDC ± 20%

500V (1,2/50µs) (IEC 60664-1, tab. F.1)

5 W

### Reverse polarity protection

Yes

### Connection

A1 (+) and A2 (-)

### Power off delay

1 s

## Main Hardware Characteristics

### Memory

Micro SD not in use

### Communication ports

RS485  
Ethernet

2 ports  
1 port, for Internet/LAN connection

### Auxiliary bus

Right side

HS BUS  
Compatible with  
GP32900003700

### USB ports

Mini USB  
Host function

Only for internal use  
Not in use

## RS485 Communications Ports

<b>Number of ports</b>	2	<b>Data format</b>	Selectable: 1 start bit, 7/8 data bit, no/odd/even/ parity, 1/2 stop bit
<b>Purpose</b>	COM1: Modbus slave COM2: Modbus slave	<b>Baud-rate</b>	9600 bits/s
<b>Type</b>	Multidrop, bidirectional	<b>Insulation</b>	See the table "Insulation between inputs and outputs"
<b>Connections</b>	2-wire. Max. distance 1000m		
<b>Protocol</b>	MODBUS RTU		

## Ethernet Port

<b>Rated inputs</b>	HTTP	<b>Connections</b>	RJ45 10/100 BaseTX				
<b>IP configuration</b>	Static IP / Netmask / Default gateway	<b>Insulation</b>	Max. distance: 100m See "Insulation between inputs and outputs" table.				
<b>DNS</b>	Primary and secondary DNS as a static or dynamic management (using DHCP server if configured)						
<b>WEB server</b>	<table border="1"> <thead> <tr> <th>Port</th> <th>N. of connections</th> </tr> </thead> <tbody> <tr> <td>80</td> <td>20</td> </tr> </tbody> </table>	Port	N. of connections	80	20		
Port	N. of connections						
80	20						

## HS Bus Specs (right side)

<b>Bus type</b>	RS485 high speed bus	<b>Note:</b>	The two GP32900003700 modules which drive the L1 and L2 buses must be connected on the right side of the GP32950030700
<b>Function</b>	Connection to master channel generator module GP32900003700		
<b>Connection</b>	By local bus on the right side		

## LEDs Indication

<b>Green LED: ON</b> ON: power ON OFF: power OFF	Flashing: 200ms ON 200ms OFF, communications OK	<b>BUS</b> OFF: no communication is present on the HSbus ON: communication error on HSbus Flashing: communication OK on HSbus	<b>Blue LED: USB</b> Not in use
<b>Yellow LEDs:</b> <b>COM 1</b> OFF: no communications on RS485 A Flashing: 200ms ON 600ms OFF, no answer from the slave	<b>COM 2</b> OFF: no communications on RS485 B Flashing: 200ms ON 600ms OFF, no answer from the slave Flashing: 200ms ON 200ms OFF, communications OK		<b>Red LED: STATUS</b> Not in use

## Based Insulation between Inputs and Outputs

Type of input/output	DC Power supply	RS485 - COM 1	RS485 - COM 2	Ethernet	USB port "H"
DC Power supply	-	2kV	2kV	0.5kV	0kV
RS485 - COM 1	2kV	-	0.5kV	2kV	2kV
RS485 - COM 2	2kV	0.5kV	-	2kV	2kV
Ethernet (LAN/Internet)	0.5kV	2kV	2kV	-	0.5kV
USB port "H" (Host)	0kV	2kV	2kV	0.5kV	-

0kV Inputs / outputs are not insulated

2kVrms EN61010-1, IEC60664-1 - over-voltage category III, pollution degree 2, double insulation on systems with max. 300Vrms to ground

0.5kVrms The insulation is functional type

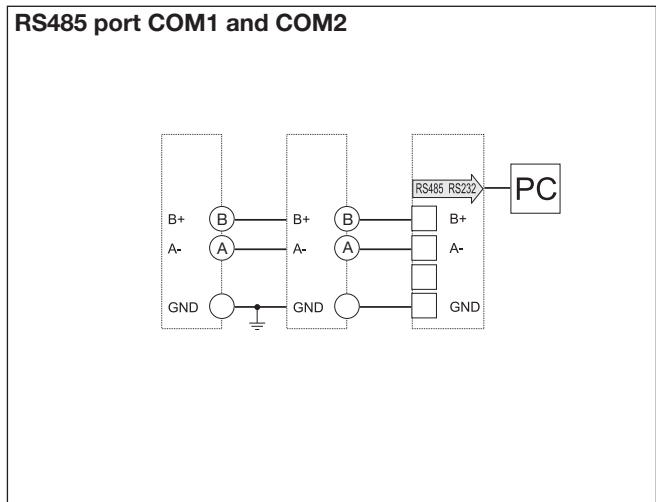
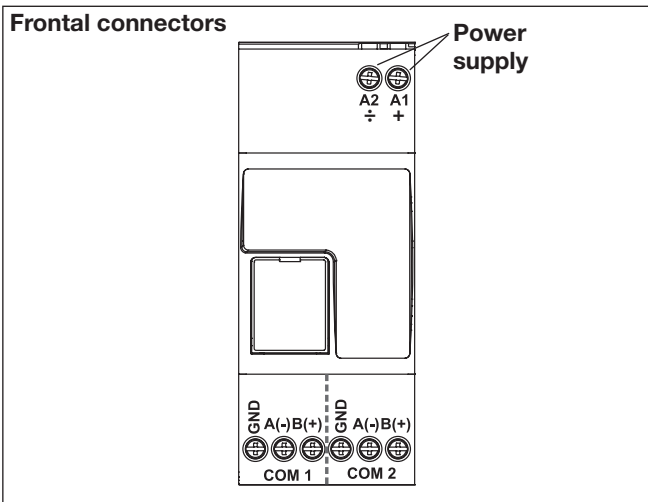
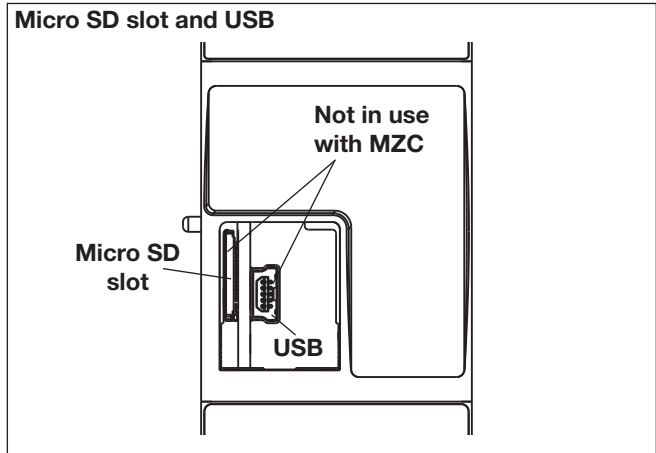
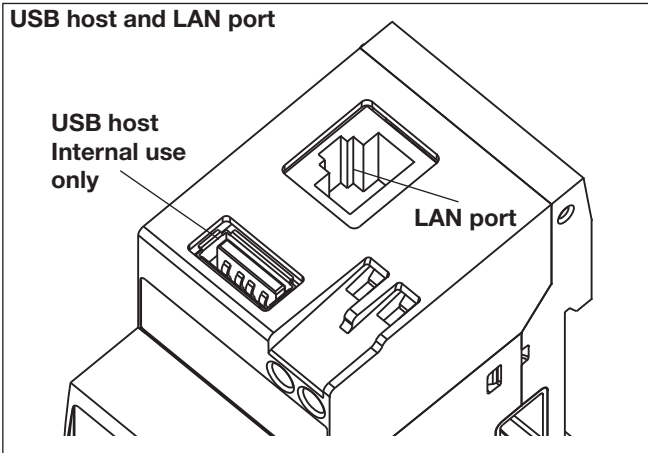
## General Specifications

<b>Operating temperature</b>	-20 to +50°C (-4°F to 122°F) (R.H. < 90% non-condensing @ 40°C)	<b>Mounting</b>	DIN-rail
<b>Storage temperature</b>	-30 to +70°C (-22°F to 158°F) (R.H. < 90% non-condensing @ 40°C)	<b>Approvals</b>	cULus, according to UL60950 <b>UL notes:</b> Max room temperature: 40°C Equipment must be supplied by a separately certified NEC class 2 (LPS) power unit.
<b>Overvoltage category</b>	Cat. III (IEC 60664, EN60664) For inputs from string: equivalent to Cat. I, reinforced insulation.	<b>CE Marking</b>	Yes
<b>Dielectric strength</b>	4000 VAC RMS for 1 minute	<b>EMC</b>	
<b>Noise rejection</b> CMRR	65 dB, 45 to 65 Hz	Immunity	EN 61000-6-2 EN 61000-4-2 EN 61000-4-3 EN 61000-4-4 EN 61000-4-5 EN 61000-4-6
<b>Standard compliance</b> Safety	IEC60664, IEC61010-1 EN60664, EN61010-1	- Electrostatic discharge	
<b>Protection degree</b> Front	IP40	- Radiated radiofrequency	
Screw terminals	IP20	- Burst immunity	
<b>Housing</b> Dimensions (WxHxD)	17.5 x 90 x 67 mm	- Surge	
Material	Noryl, self-extinguishing: UL 94 V-0	- Conducted radio frequency	
<b>Weight</b>	Approx. 150 g (packing included)	- Power frequency magnetic fields	EN 61000-4-8
		- Voltage dips, variations, interruptions	EN 61000-4-11
		Emission	EN 61000-6-3
		- Conducted and radiated emissions	CISPR 22 (EN55022), cl. B
		- Conducted emissions	CISPR 16-2-1 (EN55016-2-1)
		- Radiated emissions	CISPR 16-2-3 (EN55016-2-3)

## Connections

<b>Ethernet</b>	RJ-45 connector (10/100Base-T)	<b>Power supply</b>	2 screw terminals 1.5 mm <sup>2</sup> max Min. 0.4 Nm, Max. 0.8 Nm
<b>USB</b>	High speed USB 2.0	Cable cross-section area	
<b>RS485</b>	3 screw terminals per port	Screws tightening torque	
Cable cross-section area	1.5 mm <sup>2</sup> max		
Screws tightening torque	Min. 0.4 Nm, Max. 0.8 Nm		

## Connections



## Mode of Operation

The GP32950030700 is part of the GPMZC-SET and it has no function without the channel generators GP32900003700.

Information regarding installation, programming and handling the GP32950030700 can be found in the datasheet GPMZC-SET or the MZC installation manual.

## Dimensions

