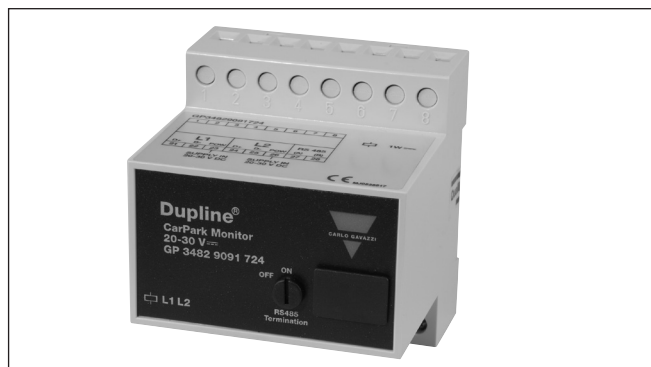


Dupline® Carpark Monitor Type GP34829091724-x

CARLO GAVAZZI



- Monitor module for the L₁ bus and the L₂ bus
- GP34829091724 is able to handle 120 sensors for each monitor modul on the L₁ bus
- GP34829091724-1 is able to handle 60 sensors for each monitor modul on the L₁ bus
- Possible to install 480 monitors in a system
- One or several displays can be connected to the built-in RS485
- Output function on the L2 bus for e.g. gate control
- Booking function for 3-colour sensors in cooperation with the Dupline CarPark Software. Only GP34829091724-1
- H4-Housing
- Programmed with the Carpark configurator GP73800080
- Termination switch for RS485 on the front
- cULus approved

Product Description

The Carpark monitor GP 3482 9091 is a part of the Dupline® Carpark concept. It is the intelligent part of the system. The monitor GP 3482 9091 have two independent busses L₁ and L₂. The L₁ bus is connected to the sensors and the L₂ is connected to other monitor modules.

It is possible to connect one or several displays on the RS485 bus. The Carpark monitor is programmed with the Carpark configurator GP 7380 0080. The GP34829091724-1 is designed to work only with 3-colour sensors and the Dupline® Carpark Software.

Ordering Key

GP34829091724

Type: Dupline® Carpark
H4-Housing

Type Selection

	Ordering no.
Carpark Monitor	GP34829091724
Carpark Monitor with booking function	GP34829091724-1

Output Specifications

Output RS 485	Gnd on pin 22 A on pin 27 B on pin 28
Communication Standard Baudrate Dielectric voltage RS485 - Dupline® L ₁ +L ₂ Protokol	RS 485 4800 500 VAC (rms) Carpark

Supply Specifications

Primary bus L₁	20-30 VDC pulsating (3-wire Dupline® bus)
L ₁ bus	Dupline®+ pin 21 Dupline®- pin 22 Power pin 23
Current consumption	≤ 27 mA ± 10%
Current consumption Dupline®	< 0.03 mA (High impedance)
Primary bus L₂	20-30 VDC pulsating (3-wire Dupline® bus)
L ₂ bus	Dupline®+ pin 24 Dupline®- pin 25 Power pin 26
Current consumption	≤ 8 mA ± 10%
Current consumption Dupline®	< 0.03 mA (High impedance)
Power dissipation	≤ 1 W
Dielectric Voltage Dupline® L ₁ - Dupline® L ₂	500 VAC (rms)

General Specifications

Programming	By GP73800080
Environment Degree of protection Operating temperature Storage temperature	IP20 B -40° to +50°C (-40° to +122°F) -50° to +85°C (-58° to +185°F)
Humidity (non-condensing)	20 to 95%
Mechanical resistance Shock Vibration	15 G (11 ms) 2 G (6 to 55 Hz)
Dimensions	H4-housing
LED Green LED First yellow LED Second yellow LED	Power ON Dupline® bus L ₁ Dupline® bus L ₂
EMC performance	EN61000-6-3 (emission) EN61000-6-1 (immunity)
Power-on delay	3 sec.
Termination switch for RS485	The switch on the front of the monitor, turns the built-in resistor on 120Ω ON or OFF.
Approval	cULus (UL60950)
MTBF	100,000 hours



Mode of Operation

The GP34829091724-x is monitoring an area of the Carpark system and transmits the available parking spaces in that area to the display via the RS485 interface built into a H4 housing module. The unit has three different configurable modes:

1. Slave mode

In slave mode the GP34829091724-x can collect data from maximum 120 sensors connected on the Dupline® bus L₁. The addressing of the sensors is done with the Carpark Configurator GP7380 0080. The numbers of free parking spaces is transmitted to the Dupline® net L₂ in order to allow Carpark Monitors in Master mode to read the information. It is possible to have up to 480 slave monitors on L₂.

There is no limit to the amount of Slave Monitors on L₁.

2. Master mode

This mode is equal to the Master Indicator mode. However, there can only be one Master monitor in the entire system. This Master provides the system with the sync signal and read and summarize on L₂ the total of free parking spaces transmitted from selected Slave modules.

3. Master Indicator mode

In Master Indicator mode, the unit collects the data from all the Slaves on the L₁ busses in the system and sends the info to the L₂ bus. By selecting the ID range, the Master can read a specific amount of ID's (Slaves on the L₁ bus) and send this info to the connected display.

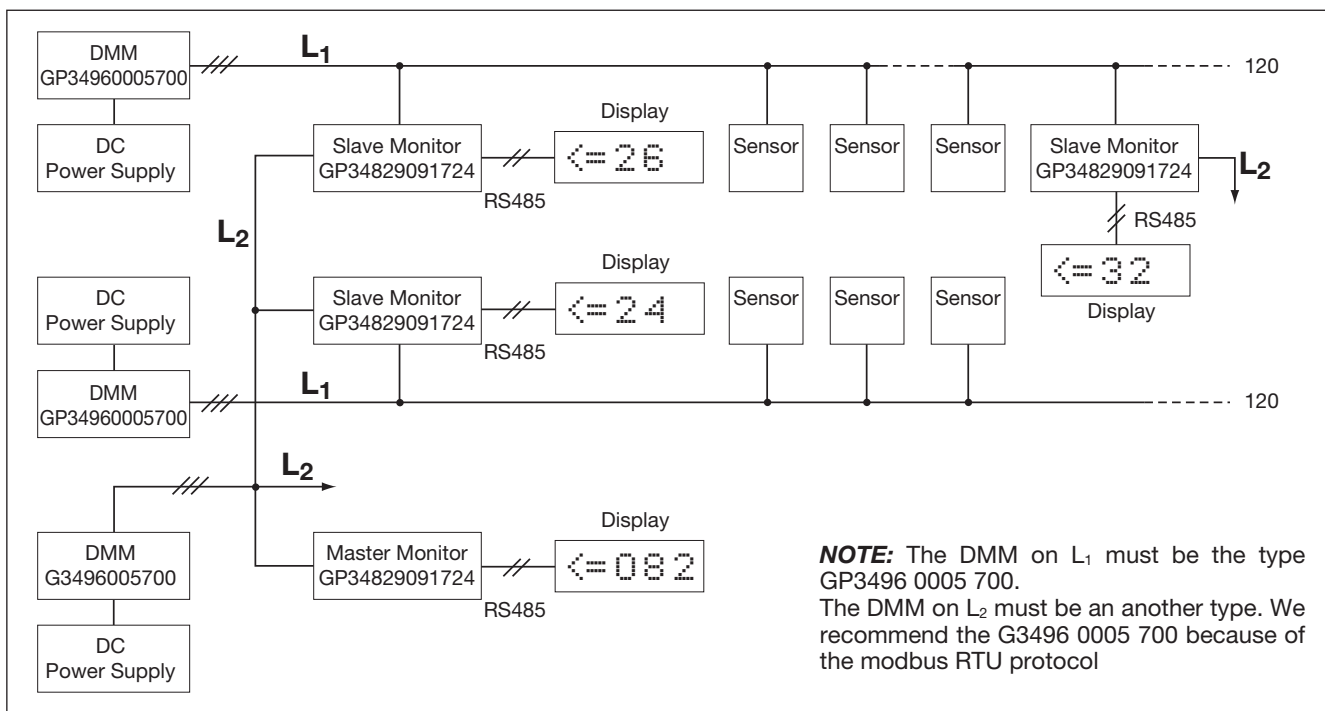
All monitor modules in slave mode are identified with a unique ID number. In Master Indicator mode, the monitor can be used to monitor a specified ID area from the multiplexer (example ID 50 to 200). This means that the monitor collects all the free parking spaces from ID 50 to ID 200 and sends the information to the Display via RS485. There is no limit to the amount of Master indicators on L₂.

An Option for e.g. gate control can be selected. This feature works on the L₂ bus on Dupline® Address A7. If the CarPark is full (occupied), the Monitor module activates A7 on the L₂ bus. This can be used to e.g. activate a gate that closes the parking area or the complete Parking. When the area is no longer full, the A7 will be deactivated again. It is possible to force A7 "On" by

using a toggle switch with a Dupline® transmitter module, if needed.

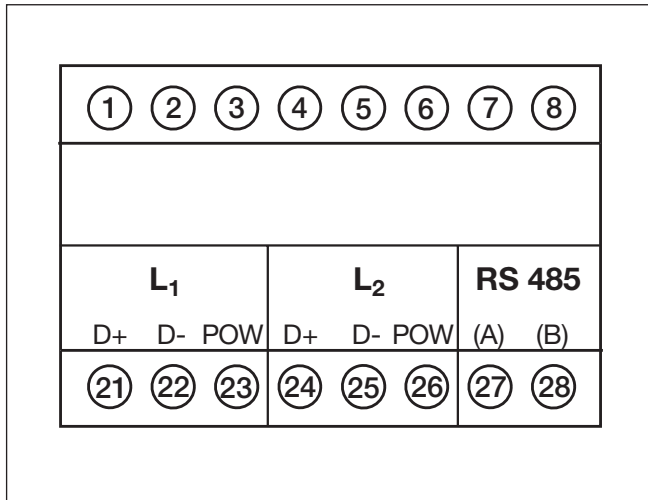
The GP34829091724-1 has the same functions in Master and Master Indicator Mode. In Slave Mode it is different. This module is designed to work with the 3-coloured Sensors and the Dupline® CarPark Software. If the Dupline® Software is not used or out of function, the 3-colour sensors work as a standard 2-colour sensors installation. Red for occupied and Green for vacant. In Slave Mode, the installer only can use the addresses A1 to H4 in "Units of Grp.". That is totally 60 3-coloured sensors. The rest of the Slave Mode is equal to the standard version.

Drawing example



NOTE: The DMM on L₁ must be the type GP3496 0005 700. The DMM on L₂ must be another type. We recommend the G3496 0005 700 because of the modbus RTU protocol

Wiring Diagram



Use 3*1,5mm² single core wire for L₁ and L₂ bus
 Use 2 wires with shield for the RS485 connection (Distance up to 1200 Meter)

General information

Each monitor can in slave mode have up to 120 sensors connected. The Carpark system allows the integrator to install up to 480 monitors in slave mode (with unique ID). This means that the system can have up to → 120 x 480 = 57,600 sensors in total.

Dimensions (mm)

