c|u|r
Systemtechnik

COMPONENTS OF PARKING GUIDANCE SYSTEMS

USS350d single space monitoring sensor

- **power and data in one cable**
- **small robust housing**
- **built-in, exposed or rail mounting**

- **measurement area up to 5m**
- **integrated, bright green / yellow / red display**
- **maintenance free**

Function

The sensor uses ultrasonic to measure the distance between itself and either the vehicle or the floor.

The results of these measurements are sent to the zone controller over a serial interface.

The zone controller compares the measurement with the stored ceiling height of the free space. After taking other factors into consideration, the zone controllers are able to drive the red / yellow / green display in the sensor.

Up to 32 sensors can be connected parallel to another on the same supply and each sensor can be addressed separately. The address is adjusted by a button in the sensor.

If communication to the zone controller is disrupted the sensor can continue to function independently. The sensor measures and displays the current state of the parking space. This means there is an emergency backup if the zone controller breaks down.

To help read the display, the sensor has five internal LEDs per color. Additionally, the sensor can be ordered with an external lamp, in which a part of the internal LEDs is integrated.

Mounting

The sensor is suitable for exposed or rail mounting. It is attached using two 4mm screws. To improve recognition of the sensor's display it is also possible to attach it to hanging cable ducts. Separating the sensor into a sensor-module and a connecting-module takes into consideration how things run on the building site. Only the connecting module is necessary to start any electro-mechanic work on site. The sensor-module is connected before operations are started.

Connection

The sensor is connected using a four cone cable (>0,5mm² e.g. telephone cable "J-YY 2x2x0.8"), two cones for the power supply and two cones for the communication. The clearly arranged clamps and the connection with an operating lever provide a fast and error-free wiring. The average cabling cost per sensor is less than 0.5€.

Technical Data

Measuring principle:	Ultrasonic-distance-measurement
Size (W x H x L):	120 x 120 x 30 mm
Inside range:	up to 5 m
Resolution:	0.05 m
Measuring frequency:	41 kHz
Brightness:	>5 cd (per color)
Voltage:	24 volt =
Supply:	Sensor: 12 mA, LEDs: 20mA
Power consumption:	0.8 watt (average)
Data communication:	RS485 2-Wire(>0.5mm²)
Operating temperature:	-20°C to +70°C
Protection:	IP43

Options

- Cable feed through the casing's base
- External lamp. If an external lamp is connected, the cable has to be feed through the sensors casing base