TECHNICAL SPECIFICATION

ATREYO ®
SOLUTIONS THAT SIMPLIFY

Ultrasonic Parking Sensor	APSENSE-110U

Features

- **Ultrasonic sensing technology**
- **Low power consumption**
- **RGB LED + external LED indicator output**
- **7 segment display for configuration**
- **8-36V power supply**
- **Configuration by commands from system**
- **Blue light support for reserved places**
- **Screw-in fastening system**

The APSENSE-110U is sensor of presence of car in the parking place multi-user parking. Sensor is working as part of Parking Management System and it is sending data about car presence.

It is working on Modbus over RS485 and also has capability to drive external light to indicate vacant place for park car. The external light colour setting and optional blinking are special function. Also from system is possible to make all indicator light blinking for any emergency situation. Support blue light indicators for reserve spaces.

Description	Parameter
Sensor	
Type	Ultrasonic
Frequency	40kHz
Sensing method	Distance detection
Sensing range	0.4m to 4m
Serial Interface	
Interface Type	RS485
Data Rate	57600bps
Signals	A and B
Data Length	8 bits
Parity	none
Stop Bits	1, 8
Flow Control	None
Connector	RJ45 common with power or optional pluggable screw connector
Protection	IEC 61000-4-2 level 4: – 15 kV (air discharge)

Description	Parameter
	– 8 kV (contact discharge)
User interface – display	
Type	7 segment, red colour
Brightness	Configurable form system
Off time	Configurable form system and menu
Data to system protocol	
Protocol type	Modbus RTU
Communication type	By device address communication
	Broadcasting communication
Indicators	
Inbuilt Indicator	5mm LED
Colours supported	Red, green, blue, magenta, yellow, white
Empty colour	Green, flash green, blue, flash blue
External lamp	Support of APL-10 model and APL-11
Lamp connector	3 wire pluggable screw connector

Description	Parameter
External lamp extra functions	Lamp brightness setting
User interface	
Keys	3 push keys
Functions	
Configuration locally	• Modbus address • Range of detection • Time of reaction (delay)
Configuration from system by commands	• Range of detection • Time of reaction • LED colour for empty (in some application use blue for handicaps people)
Other functions	• Restarting devices over MODBUS • Displaying MODBUS address on all devices • Displaying detection range on all devices • Displaying time of reaction on all devices
Special functions	Synchronised blinking yellow colour of all external indicator for emergency use

Description	Parameter
Power Supply	
Connector	RJ45 (common with communication lines) or optional pluggable screw connector
Power supply range	8-36V DC
Power consumption (approx)	• Display on: 0.60W (24V) • Display off: 0.25W (24V) • Display on and external LED indicator: 0.85W (24V) • Display off and external LED indicator: 0.50W (24V)
Physical Characteristics	
Installation	Ceiling or overhead rail
Housing	ABS grey colour
Weight	140g
Dimensions	110 mm diameter
Environmental Specification	
Operating Temp.	-10 ~ 55°C (-13 ~ 158°F)
Storage Temp.	-40 ~ 85°C (-40 ~ 176°F)
Ambient RH	5% to 95% (non-condensing)

Ordering selection chart

Models	Hardware Options	
Model	**Connector type**	
APSENSE-110U	**RJ45**	**Pluggable screw terminal**
APSENSE-110U	√	√
APSENSE-110U-RJ	√	
APSENSE-110U-SCR		√

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