

## Product Specification

# SQ-Panel

### Real Estate Air Quality Display with Sensors

The Carenuty SQ-Panel is a smart home device, designed to enhance your home environment by displaying the key parameters of the ambient air and human presence.



## Basic Information

<b>Product series</b>	Indoor Air Quality Sensor
<b>Type</b>	Wall panel
<b>Voltage</b>	100-240 AC 50/60Hz
<b>Max power</b>	5 W
<b>MCU</b>	EFR32 Silicon Labs
<b>Certification</b>	CE/ROHS/WEEE

## Appearance

<b>Color depth</b>	16.7 M
<b>Dimension</b>	70.4x70.4x46.4 mm
<b>TFT Screen size</b>	2.6"
<b>TFT Screen resolution</b>	240x240px
<b>Weight</b>	105g
<b>Casing materials</b>	PCLEXAN121R
<b>Casing color options</b>	Back / White / Black-and-White

## Features

### Sensors

<b>Temperature Sensor</b>	-40...85 °C
<b>Humidity Sensor</b>	0...100 %
<b>Pressure Sensor</b>	300...1100 mbar / hPa
<b>Air Quality Index</b>	Proprietary Algorithm
<b>equivalent CO<sub>2</sub>-Level Sensor (eCO<sub>2</sub>)</b>	400 ppm up to 29206 ppm
<b>Total Volatile Organic Compounds (TVOC)</b>	0 ppb up to 32768 ppb
<b>Radar Presence Detector</b>	AI-assisted

<b>Border Router</b>	Carenuity Border Router as separate device
<b>Mobile App operating system</b>	Android & iOS
<b>Cloud connection and data logging</b>	Yes
<b>Data analysis and presentation</b>	Yes, over Mobile App
<b>OTA firmware update</b>	Yes
<b>Setting alarm thresholds and Alarms</b>	Yes, over Mobile App or Display
<b>Setting backlight intensity [1 – 100%]</b>	Yes, over Mobile App or Display
<b>Setting display timeout [0 – 30s]</b>	Yes, over Mobile App or Display
<b>Dynamic temperature calibration against backlight intensity</b>	Yes

### Wireless standard

<b>PHY / MAC / 6LOWPAN</b>	IEEE 802.15.4
<b>Protocol</b>	Openthread Sub-GHz at 868.3 MHz
<b>Application Protocols</b>	Secure CoAP, MQTT
<b>Antenna</b>	PCB antenna
<b>Encryption type</b>	DTLS / AES 128

### Working Environment

<b>Applicable place</b>	Indoor
<b>Working temperature</b>	-40 ~ 80 °C
<b>Working humidity</b>	Up to 90 % RH

## Datasheet

SQ-Panel – V1  
Doc-Ref. CG-5222000

Doc-Version 1.3  
Valid from: 2024-04-25



### Installation

<b>Installation method</b>	Flush mounting box
<b>Installation type</b>	Screws installation
<b>Wiring way</b>	N and L
<b>Wire diameter</b>	0.75 – 2.5 mm <sup>2</sup>

Norm references:



For more information please contact us.

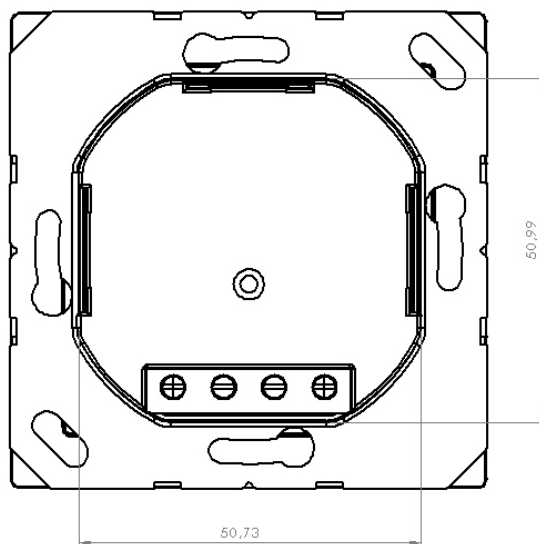
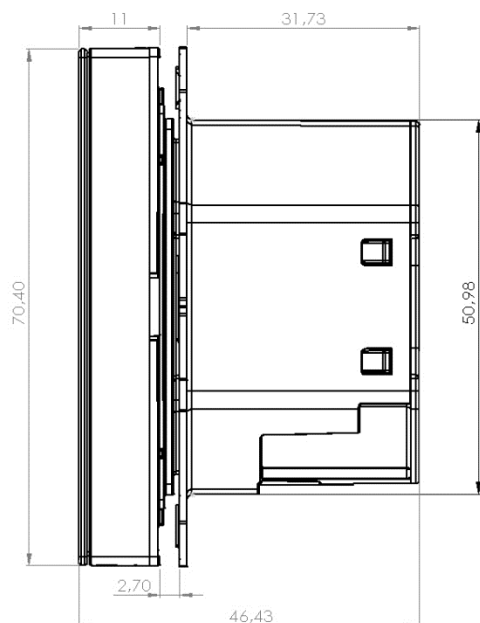
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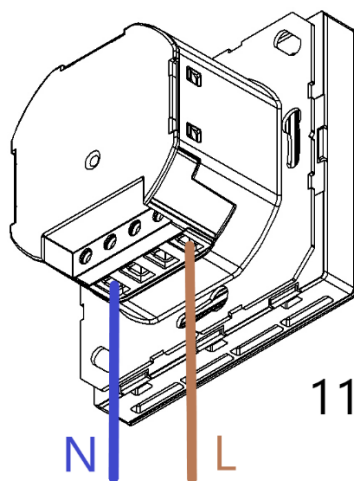
## Drawings



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110 - 240 VAC  
50/60 Hz