

PreonCube Condition Advanced

Measuring cube for recording temperature, rel. Humidity and relative Illuminance with wireless communication

Product attributes

- Mobile, self-sufficient radio measuring spot with internal sensors
- Temperature, relative humidity and relative illuminance
- Measured value acquisition, buffering and radio transmission (min. 128 Bit AES encryption)
- Convenient measurement value analysis and data export in the PreonLive online portal my.virtenio.com¹
- up to 3 years battery life with lithium-ion battery
- Modular compatibility with all Virtenio Cubes and Gateways
- Robust housing (IP65) with pressure compensation valve
- Compact dimensions of 65 x 65 x 57 mm (L x W x H)



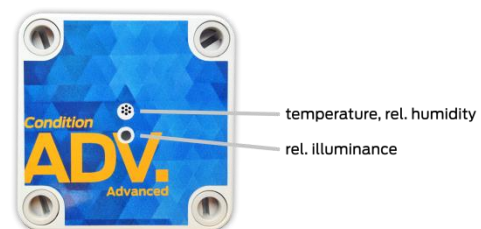
Description

The PreonCube Condition Advanced is a wireless radio monitoring point with internal sensors. Due to its handy and compact design without protruding sensors and the long battery life, the Cube is ideally suited for self-sufficient monitoring of buildings, warehouses, transport containers or hard-to-reach environments. With its sensors, it records data on temperature, relative humidity and relative illuminance at customer-specific intervals. Depending on requirements, it transmits these measured values wirelessly to other measuring points or directly to a radio gateway. From the optionally available gateways, the data is transferred to the PreonLive online portal where it can be analyzed and exported. This allows you to monitor your remote PreonCubes from any PC, smartphone or tablet with Internet access and always have an overview of their local environmental conditions.

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Sensors

The integrated sensors of the cube have access to the environment via two housing openings. They measure temperature, relative humidity and relative illuminance in the **Condition Advanced** type. Sensor openings are located on the upper side of the housing.



Applications

- Areas of application: Buildings, warehousing, transport
- Usage: Monitoring of buildings, halls, rooms or transport containers
- Monitoring, verification, control and alarming
- spot checks or long-term measurements

¹ Only available with PreonGate Gateway products



General		
Dimensions:	65 x 65 x 57 mm (L x W x H)	
Weight:	180g	
Housing:	Polycarbonate	
Protection class:	IP65 with pressure compensation valve	
Power supply:	Lithium-ion battery with 2350mAh capacity; USB power supply	
Operating modes:	Battery; power supply with 5V@500mA	
Operating life time:	up to 3 years without recharging (depending on configuration)	
Memory:	Flash, non-volatile	
Operating temperature:	-20°C to +50°C / 0°C to +40°C in power supply mode	
Interaction:	Touchless Reed Switch, LED (two-color)	
Interfaces:	Micro-USB connector for USB power supply	
Radio communication		
Radio frequency	2.4 GHz, license-free ISM band	
Radio standard	IEEE 802.15.4	
Range (up to)	outdoor 300m / indoor 30m	
Security	At least 128 Bit AES	
Radio protocol	IEEE 802.15.4 (P2P); 6LoWPAN with Duty Cycling (via SW update)	
Radio Channels	16	
Transmission interval	15 min (standard, programmable)	
Sensors		
Measuring interval	15 min (standard, programmable)	
Temperature	Measuring range	-20°C to +50°C
	Resolution	16-Bit
	Accuracy	+/- 0.3°C
rel. Humidity	Measuring range	0-100% relative humidity (non-condensing)
	Resolution	12-Bit
	Accuracy	+/- 2% rH
rel. Illuminance	Measuring range	1rlx to 65355rlx
	Resolution	16-Bit
	Accuracy	+/- 15%, spectral unadjusted
Norms and standards		
	 	
Electrical safety	EN 62368-1, EN 62311	
EMC	EN 61326-1, EN 301489-1/-17	
Radio	EN 300 328	
RoHS	EN 50581	

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