RAYBASED

Smart Controller

Wireless monitoring and control.

The Raybased Smart Controller enables wireless monitoring and control of all key electrical systems and components in a building. Because of its small size, it easily mounts behind wall switches, power sockets, in junction boxes or inside light fixtures. Being wireless makes it much easier and quicker to install than any other controllers. These smart devices are wirelessly programmed and configured before or after installation. They can be locally or remotely updated with new functionality at any time, as needs change or when installation must to be expanded. This makes them infinitely flexible and perfect for retrofitting in existing buildings without any rewiring.

Features

- Relay on/off control of load.
- Measure and report energy, current, voltage, power.
- Reads four inputs, which can connect to various switches.
- Over temperature protection, auto resetting.
- Connects to external translators for standards based analog and digital control.
- Over the air updates of software and configurations.
- Reports on operating conditions and faults for efficient management and maintenance.

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Specifications

Standards

- Intertek Semko S mark.
- CE approval
- Electrical testing acc to EN 60730-1:
- EN 61000
- ETSI EN 301489
- EN 55016
- ETSI EN 300328

Power / Performance

- Operating voltage: 100 - 250V ~ 50/60 Hz.
- Typical power consumption: 0,36W.

Communication

- Communicates in the 2,4 GHz band using a highperformance, ultra high reliability protocol.
- Can connect to expansion modules using a wired connection.

Environment

- Climatic withstand according to EN 50491-2
- Ambient operating temperature: -20 to +35 Centigrade.
- Maximum 90% non-condensing relative humidity.

Load

- Maximum load: 16A general purpose.
- Software defined over current protection with selectable fuse characteristic.
- Resistive 10A, 50000 cycles
- Induktive 8A, 35000 cykles
- Motor 8A, 35000 cycles
- Tungsten 3A, 25000 cycles

Input

- Four inputs allowing connection to any type of external switch.
- Switch should close to ground i.e.neutral phase. Contact current 1 mA.

Energy measurement

- Internal circuitry allows measuring load apparent and absolute power, energy consumption, voltage, current and power factor.
- Accuracy: Better than 2%. Can be manufactured to tighter tolerance at request.

Connections

- Power, load and neutral: Multi core wire 1.5 mm^2, length 15 cm.
- Switch inputs: Four pole Wago push-in connectors for 1,5 mm^2 installation wire.
- Expansion connector: Mating cables available in different lengths.

L: Phase. Must belong to the same group as Neutral
N: Neutral
M: Return from load. Connected to N via 1 mOhm shunt resistor.
→: Relay output to load.