

SOLEXUS SOLAR JUNCTION BOX SERIES 1104 RP

Solexus 1104 RP series offers complete fire protection, monitoring and control of the PV Solar module. The module unit communicates with the central command box over the power lines and connects to the existing (PLC) power line carrier communication infrastructure.

Rational Products has many products and service available to monitor streetlighting, sewage installations. The complete platform is web-based and offers reports, alarms, logging etc.

The unit in the solar module allows to monitor and control each individual module on a very large distance. Power consumption in the solar module is very low and independent of sunlight. The system works also at night, what makes reliable theft protection possible.

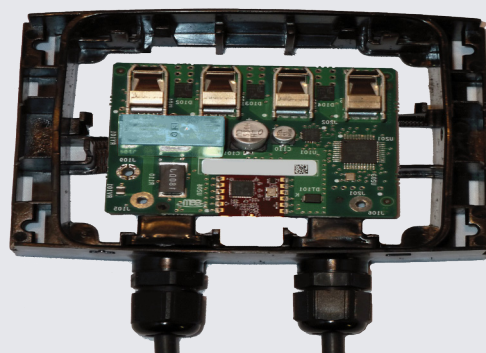
The system consists of a small slave unit in the solar module.

The slave is powered over the existing powerline from an external power source through a patented method.

The Slave unit sends signals over the power line with a highly reliable PLC Power Line Carrier signal. This allows sending as many data as is desired.

The module unit is placed into the Junction Box and directly connected to the PV module.

It collects the PV module's parameters and send the data to the Master device.



SOLEXUS JUNCTION BOX SERIES 1104 RP SPECIFICATIONS

ELECTRICAL CHARACTERISTICS JUNCTION BOX

- Rated voltage: TUV:1000V DC / UL:600V DC
- Working voltage 40 V DC
- Contact resistance: $\leq 5m \Omega$
- Current rating: 10 A
- Safety Level: class II
- Diodes: 3, Schottky

ELECTRICAL CHARACTERISTICS MASTER AND SLAVE

- 230 VAC supply
- I/O as needed
- Programmable logic controller
- Power Line carrier - Single phase
- 230VAC or 400 VAC
- Local GUI

MECHANICAL CHARACTERISTICS

- Locking mechanism to align top and bottom housing
- Removable top cover
- Temperature range: $-40^{\circ}C + 85^{\circ}C$
- Overall dimensions:
 - Length: 106mm
 - Width: 78mm
 - Height: 19.90mm
- Cable type: $4mm^2 / 6 mm^2$
- Cable length: on request
- Connectors: all solar types
- Durability: 20 cycles (top to base)
- Housing material: PPO
- Housing color: Black
- Flame class: UL94-V0
- Contacts:
 - Material: Copper alloy
 - Plating Contact Area: Tin (Sn) over Nickel (Ni)
- Cable pull-out force: 500 N
- available in a version for
 - standard ribbon configuration
 - back-contact crystalline solar cells.

