

# Power

## RES24

### Remote Feeding Medium Power Down Converter



RES24 Remote feeding down converter

- › Down converter for remote feeding applications
- › Compliant with EN60950-21 RFT-C
- › Up to 360W output power
- › 19" and ETSI compatible
- › 200mm (7.87") deep
- › Field interchangeable module

**This compact 3x120W remote energy solution provides high availability of power to remote sites in the local loop of the newest networks.** This solution takes advantage of the battery energy back-up power provided centrally. In this way, high availability is provided at the remote site without increasing the number of remote battery locations and the exponential costs associated with their maintenance.

The system is composed of three 120W modules. The module inputs are fed by a common high voltage bus combining 24 copper pairs connected to the central office equipment. The lateral cooling of the system provided by a removable fan tray enables the installation of the system horizontally or vertically to secure excellent cooling in street cabinets located above- or underground.

The 200mm / (7.87") deep system is delivered in either 19" or ETSI compatible rack mounting. The module can be quickly and very cost effectively installed in the network as it does not require any connection to the utility network, or any site safety approvals. The energy system is designed to operate on temperature range from -25°C to 70°C in forced air-cooling.

Dual power bus supports very high reliability. All power modules can be easily replaced in the field without interruption of power. The number of copper pair connections is designed independently of the number of power modules. It enables the reduction of copper pairs, necessary secure redundancy at the module level and ease the dimensioning of the number of pairs in regard to the distance from the central up-converter.

An embedded module combining five outputs and site alarm monitoring completes the system. Up to six sites dry alarms can be connected to the remote power system. A modulator combines these alarms and provides a signal that can be reported to the central office up converter which allows site monitoring, lines and power conversion from a central location.

## RES24L013RFM48N Remote Feeding down converter

Part Number:

RES24L011RFM48N: down converter system including 3 input cards, 1 converter, monitoring unit and fan tray

RES24L012RFM48N: down converter system including 3 input cards, 2 converters, monitoring unit and fan tray

RES24L013RFM48N: down converter system including 3 input cards, 3 converters, monitoring unit and fan tray

### Electrical

Input Voltage: .....200 to 320Vdc

Input Current

(per module): .....0.56A @ nominal power  
0.86A maximum

Number of input:.....3 (maximum)

Efficiency\*: .....85% typical  
\* including start-up protection system

Power output:

(per module): .....120W  
(maximum): .....360W

Output voltage:.....-54.6 to -53.4Vdc

Current output

(per module): .....2.2A @ 54Vdc

### Mechanical

Dimensions:

mm:.....66H x 448W x 204D  
inches:.....2.6H x 17.6W x 8D

Mounting:.....19" or ETSI

Weight:

Full shelf: .....4.288kg  
Converter module:.....0.410kg

### Connections

DC input: .....Female Molex .100" pitch C-grid

DC output: .....2-poles terminal block (0.14 to 1.5 mm<sup>2</sup>)

Alarm inputs: .....12-poles terminal block (0.14 to 1.5 mm<sup>2</sup>)

Alarms outputs: .....Female Cage Clamp Wago Multi Connection  
system (0.08 to 0.5 mm<sup>2</sup>)

Communication .....2-poles terminal block (0.14 to 1.5mm<sup>2</sup>)

### Environmental

Temperature:

Standard:.....-25 to 70°C (-13 to 113°F)  
Storage:.....-40 to 70°C (-40 to 176°F)

Humidity:

Operating.....5 to 95% RH non-condensing  
Storage: .....5 to 100% RH non-condensing

Elevation:.....Up to 2500m (8200ft)

Cooling:.....Fan cooled (left to right)

### Related Components

Modules:

CO3085/60.....DC input card  
REC01D48FN:.....DC/DC -54V down converter (120W)

Accessories:

5304 500 00741 .....Mating connectors kit for DC output, alarms  
and communication connections  
5304 500 00631 .....3 input cables kit (2,5m length)  
4004 118 30381 .....Blind panel for down converter module

### Standards

Safety:.....CE marked  
EN60950

Environment:.....RoHS compliant  
IEC 60068-2-27

EMC: .....ETSI EN 300 386