

# Power

## RES96

### Remote Feeding High Power Down Converter



RES96 Remote feeding down converter

- › Down converter for remote feeding applications
- › Compliant with EN60950-21 RFT-C
- › Up to 1800W output power
- › 19" and ETSI compatible
- › 250mm (9.84") deep
- › Field interchangeable module
- › Integrated monitoring and distribution

The customer-configured remote energy solution of Alpha Technologies is the perfect answer to provide high availability of power to remote sites in the local loop of the newest networks. The system connects to copper pairs networks powered in the central office equipment. 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 and risks associated with their maintenance.

The module inputs are fed by a common high voltage bus combining up to 4 x 24 copper pairs connected to the central office equipment. Modular input cards enable operators to optimise and upgrade system dimensions in regards to the power needs, copper pairs diameter and distance from central up converter. 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 under-ground.

The system can be quickly and very cost effectively installed in the network as it does not require any connection to the utility network, nor any site safety approvals. The 250mm (9.84") deep shelf is delivered in either 19" or ETSI compatible rack mounting. The energy system is designed to operate on temperature range from -25°C to 70°C. The dual power bus support very high reliability. All modules can be easily replaced in the field without interruption of power. A 48VDC input connection enables back-up of services during maintenance or intervention on the network.

The MODU controller card enables to monitor remotely up to 6 additional site digital inputs in addition to the energy system. The alarms are modulated and can be sent over one single copper pair to the central energy system.

## RES96L603RFM48N Remote Feeding Down Converter

Part Number: RESxxL06nRFM48N: down converter system including from 2 to 4 input cards, from 1 to 3 converters, monitoring unit and fan tray with **xx** being a multiple of 24 lines up to 96 lines and **n** the number of power down converter

### Electrical

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

Input Current  
(per module): .....2.7A @ nominal power  
4.4A maximum

Number of input:  
(per input card): .....3  
(per shelf): .....12 (maximum)

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

Power output:  
(per module): .....600W  
(per shelf): .....1800W

Output voltage: .....-54.2 to -53.4Vdc

Current output  
(per module): .....10A @ 54Vdc

### Mechanical

Dimensions:  
mm: .....88H (2U) x 441W x 248D  
inches: .....3.5H x 17.4W x 9.8D

Mounting: .....19" or ETSI

Weight:  
Empty shelf: .....2.4kg (5.3lb)  
Full shelf: .....4.490kg (9.9lb)

### 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 158°F)  
Extended: .....-40 to 70°C (-40 to 158°F)  
Storage: .....-40 to 85°C (-40 to 185°F)

Humidity:  
Operating .....10 to 100% RH non-condensing  
Storage: .....10 to 100% RH non-condensing

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

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

### Related Components

Modules:  
CO3245/60 .....DC input card  
REC06D48FN: .....DC/DC -54V down converter (600W)

Accessories:  
4004 112 82991 .....Blind panel for input card  
4004 112 83081 .....Blind panel for converter module  
5304 500 01121 .....Mating connectors kit for 2 DC outputs, battery, alarms and communication connections  
5304 500 01001 .....Mating connectors kit for for DC output, alarms and communication connections  
5304 500 00631 .....3 input cables kit (2,5m length)

### Standards

Safety: .....CE marked  
EN60950

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

EMC: .....ETSI EN 300 386