

NEW PRODUCT  
ANNOUNCEMENT



Designed for the highest reliability even under extreme operating conditions

## Power Distribution Unit

### For Single Band Tower Mounted Amplifiers

**T**hese power distribution units from Andrew Corporation are optimized for operation with Andrew standard 12 dB gain, single or dual band tower mounted amplifiers.

The power distribution unit (PDU) provides power supply for up to six tower mounted amplifiers (TMA) via the RF feeder and a bias tee at the base station level.

The unit is easily and quickly installed in various types of base stations and provides the following functions:

**Voltage regulation**, ensuring a clean and stable supply is delivered to the TMA with improved power efficiency;

**Current monitoring**, providing fault detection on each output for the TMA and supply path;

**Alarm reporting**, visual for easy on-site troubleshooting as well as an interface for remote alarm indication.

The PDU is part of Andrew TMA platform, a complete range of superior TMA products incorporating state-of-the-art technology and efficient production methods. Housed in a compact rack-mountable package, the PDU is engineered to ensure the highest reliability in demanding environments and is tolerant to extreme supply and load conditions.

Double power versions are compatible with dual band TMA incorporating two low-noise amplifiers (LNA).

The PDU can be ordered as a kit, including a standard set of cables.

- Power supply options available, supporting -48V/+24V nominal supply voltage
- Resettable fuses ensure fault isolation and automatic recovery from transient fault conditions
- Lightning protection provided by circuitry on each input and output

# Power Distribution Unit – Product Specifications

## Application

Part number	RF150955-1A	RF150954-1A	RF150953-1A
Number of outputs	6	4	2
Load per output	Single LNA	Single LNA	Single LNA
Nominal supply voltage, Vdc	-48/+24V	-48/+24V	-48/+24V

## Electrical

Input voltage, Vdc	±20 to 60	±20 to 60	±20 to 60
Maximum input current@20Vin, A	2.4	1.6	1.0
Output voltage, Vdc	12	12	12
Nominal current per output, mA	250	250	250
Maxim current per output, mA	400 <sup>(1)</sup>	400 <sup>(1)</sup>	400 <sup>(1)</sup>
Maximum total output current, A	2.4 <sup>(2)</sup>	1.6 <sup>(2)</sup>	0.8 <sup>(2)</sup>

## Monitoring and control

Input voltage indicator	
Green LED	Ok
Red LED	Failure
DC/DC converter indicator	
Green LED	Ok
Red LED	Failure
TMA status indicator	
Green LED	Ok
Red LED	Failure
Enable/disable TMA outputs	Dip-switch for each output
Enable/disable/Reset TMA alarm	Dip-switch for each output
Summary alarm output	Relay contact; normally open and normally closed available

## Mechanical

Height, depth, width, mm (in)	.44 x 130 x 483 (1.75 x 5.1 x 19)
Weight - without mounting hw, kg (lb)	1.1 (2.4)
Finish	Light gray

## Mounting

Rack mounting	19" EIA, 1HU
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## Grounding

Ground terminal, mm (in)	.6 (1/4") dia
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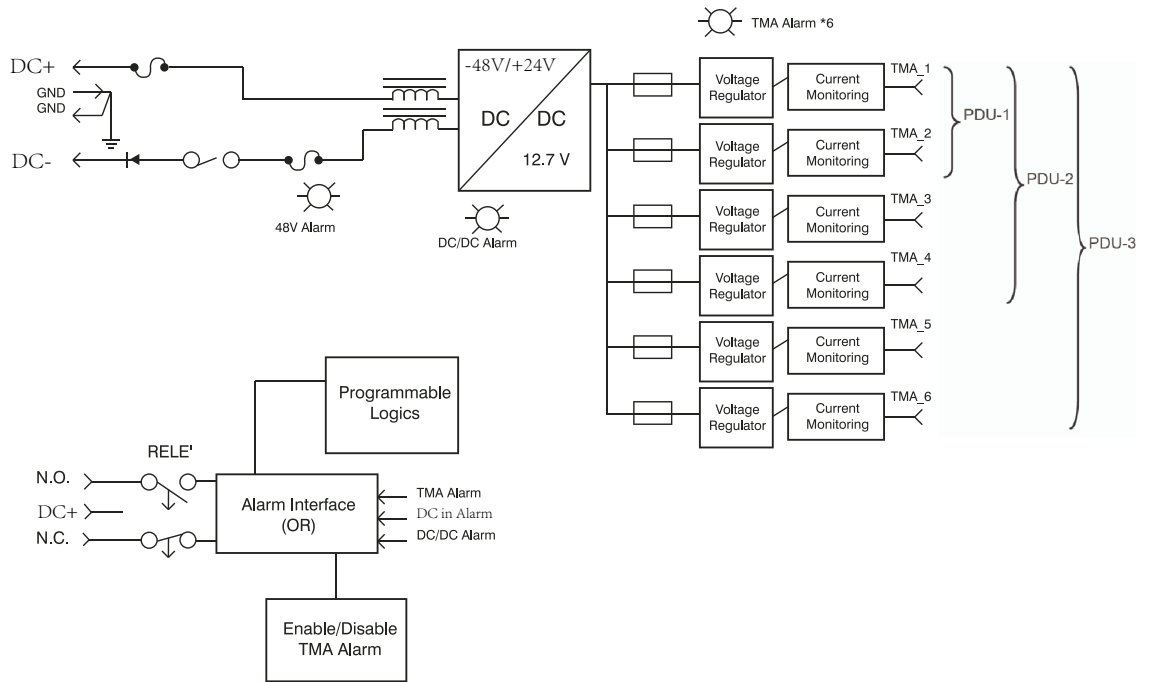
## Environmental

Operating temperature range	-10° C to +60° C
Storage temperature range	-40° C to +85° C
Ingress protection	IP20

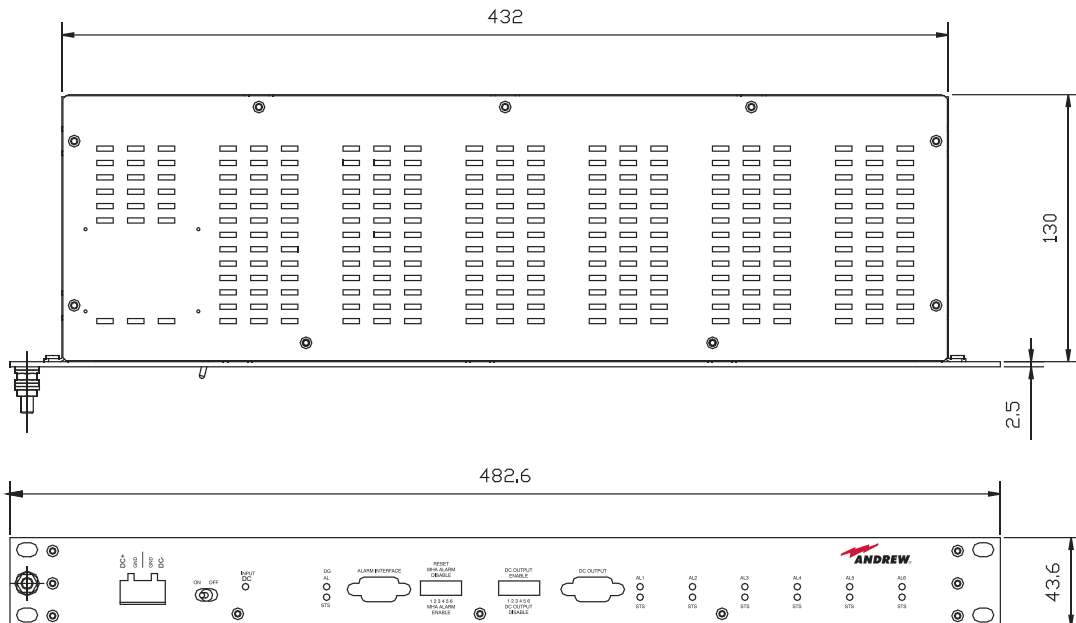
## Accessories

DC in cable	
Part number	RF404647
Cable type	.2 x 24 AWG
Length, m (ft)	.5 (16)
Termination	Solder pins
Alarm cable	
Part number	RF404648
Cable type	.3 x 24 AWG
Length, m (ft)	.7 (23)
Termination	Solder pins
Bias tee harness	
For RF100955	Part number RF404649
	Cable type .6 x RG174-A/U
	Length, m (ft) .6 (20)
	Pigtails, m (ft) .0.5 (1.5)
	Termination .6 x SMA-m
For RF100954	Part number RF404668
	Cable type .4 x RG174-A/U
	Length, m (ft) .6 (20)
	Pigtails, m (ft) .0.5 (1.5)
	Termination .4x SMA-m
For RF100953	Part number RF404669
	Cable type .2 x RG174-A/U
	Length, m (ft) .6 (20)
	Pigtails, m (ft) .0.5 (1.5)
	Termination .2 x SMA-m

# Power Distribution Unit – Product Specifications



Block Diagram



Mechanical Drawings

## Power Distribution Unit – Ordering information

Model number	Description	Supply voltage	PDU part no.	Cable set
RF100955	3 Sector PDU (6 Outputs)	-48V/+24V	RF150955-1A	Included
RF100954	2 Sector PDU (4 Outputs)	-48V/+24V	RF150954-1A	Included
RF100953	1 Sector PDU (2 Outputs)	-48V/+24V	RF150953-1A	Included

## Notes:

- (1)The Maxim current is defined in peak mode, on time less than 30 seconds, duration less than 20%, in off time, the current mustn't exceed normal output value.
- (2)The total Maxim current is also defined in peak mode, on time less than 30 seconds, duration less than 30%, in off time, the current mustn't exceed the sum of normal values.
- (3)Each cable set includes: DC in cable, alarm cable, and bias tee harness



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