



MAXNET®

Chassis & Power Supplies Power Supply



Patented
U.S.# 6,842,348;
Cdn.# 2,404,844

5RU Active RF Chassis
(front view)

D3.1/CCAP™
Compliant

Specifications

24V Power Supply (for use with RF & L-Band)

ELECTRICAL	REMOTE POWER SUPPLIES MNRPS or MNRPSCM ⁽¹⁾	AC POWER SUPPLIES MNAC-110 or MNAC-110CM ⁽¹⁾	AC POWER SUPPLIES MNAC-220 or MNAC-220CM ⁽¹⁾	DC POWER SUPPLIES MNDC or MNDCCM ⁽¹⁾
INPUT				
INPUT VOLTAGE	24.0 ± 0.5 VDC	110 ± 10 VAC	220 ± 20 VAC	48.0 ± 12.0 VDC
FREQUENCY	DC	50/60 Hz	50/60 Hz	DC
INPUT CURRENT	⁽³⁾	2.0 Amps AC	1.0 Amps AC	2.5 Amps DC (48 VDC)
POWER FACTOR	n/a	> 0.8	> 0.8	n/a
OUTPUT				
OUTPUT VOLTAGE	23.5 ± 0.5 VDC	24.0 ± 1.0 VDC	24.0 ± 1.0 VDC	24.0 ± 1.0 VDC
DC OUTPUT CURRENT	3.6 Amps (max) ⁽³⁾⁽⁴⁾	3.6 Amps (max) ⁽⁵⁾	3.6 Amps (max) ⁽⁵⁾	3.6 Amps (max) ⁽⁵⁾
RIPPLE VOLTAGE	n/a	200 mV P-P (max)	200 mV P-P (max)	200 mV P-P (max)
MAXIMUM POWER OUTPUT	n/a	86.4W	86.4W	86.4W
OTHER				
EFFICIENCY	> 95%	> 80%	> 80%	> 80%
OPERATING TEMPERATURE	-40°C to +60°C (-40°F to +140°F)	-40°C to +60°C (-40°F to +140°F)	-40°C to +60°C (-40°F to +140°F)	-40°C to +60°C (-40°F to +140°F)
HUMIDITY	5-95% (without condensation)	5-95% (without condensation)	5-95% (without condensation)	5-95% (without condensation)
APPROVALS	n/a	Power Supply Component: UL, CSA, CE; Entire Module: cULus, FCC	Power Supply Component: UL, CSA, CE; Entire Module: cULus	Power Supply Component: UL, CSA, CE; Entire Module: cULus, FCC
TEST POINT	Front Panel (Red(+), Blk(Com))	Front Panel (Red(+), Blk(Com))	Front Panel (Red(+), Blk(Com))	Front Panel (Red(+), Blk(Com))
24V POWER INDICATOR	Front Panel LED	Front Panel LED	Front Panel LED	Front Panel LED
24V FAILURE NOTIFICATION ⁽²⁾	Form 'A' Relay (MNRPS) Form 'A' Relay (MNRPSCM)	Form 'C' Relay (MNAC-110) Form 'A' Relay (MNAC-110CM)	Form 'C' Relay (MNAC-220) Form 'A' Relay (MNAC-220CM)	Form 'C' Relay (MNDC) Form 'A' Relay (MNDCCM)
CURRENT VARIATION NOTIFICATION ⁽¹⁾	Rear Panel Form 'A' Relay & Front LED (MNRPSCM only)	Rear Panel Form 'A' Relay & Front LED (MNAC-110CM only)	Rear Panel Form 'A' Relay & Front LED (MNAC-220CM only)	Rear Panel Form 'A' Relay & Front LED (MNDCCM only)
TERMINAL BLOCK WIRING	# 14 AWG	# 14 AWG	# 14 AWG	# 14 AWG
WEIGHT	1.5 lbs (0.7 kg)	2.9 lbs (1.3 kg)	2.9 lbs (1.3 kg)	2.2 lbs (0.9 kg)
DIMENSIONS	8.66"H x 1.82"W x 11.75"D (21.99H x 4.62W x 29.84D cm)			

- NOTES:
- (1) CM on the end of the part number indicates current monitoring capabilities. Current through the chassis interface is monitored. Fluctuation in DC current greater or less than 200mA from nominal operating level is annunciated by opening a contact wired to the rear terminal block and turning 'off' the current monitor LED.
 - (2) 24V failure notification is initiated when DC voltage level drops to less than 22 VDC.
 - (3) 24V A and 24V B inputs are diode 'or'd' prior to connection to the chassis power bus interface connector. Maximum DC current to the chassis is 3.6 Amps.
 - (4) Maximum DC current delivered through the remote power supply interface connector (to chassis power bus).
 - (5) Total DC output current delivered through the power supply interface connector (to chassis power bus) and through the output terminals on the rear of the power supply.

Rear Panel Terminal Block Assignment

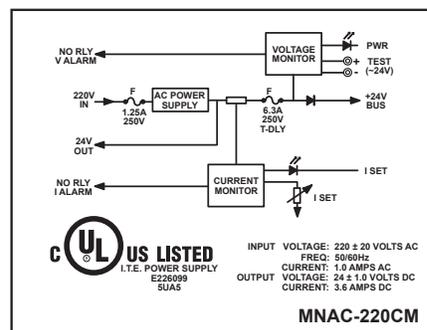
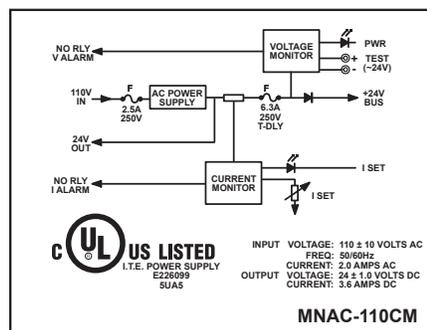
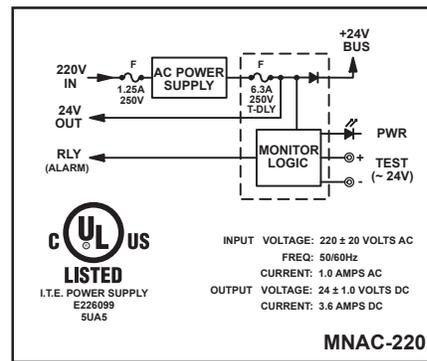
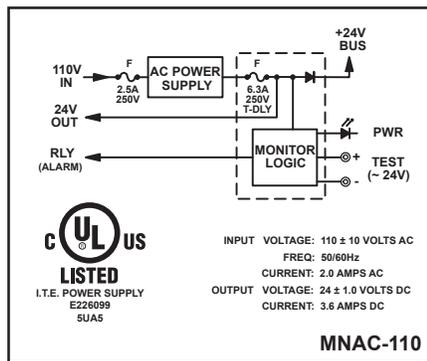
TB #	REMOTE POWER SUPPLY MNRPS	REMOTE POWER SUPPLY WITH CURRENT MONITOR MNRPSCM	AC POWER SUPPLIES MNAC-110 & MNAC 220	AC POWER SUPPLIES WITH CURRENT MONITOR MNAC-110CM & MNAC-220CM	DC POWER SUPPLY MNDC	DC POWER SUPPLY WITH CURRENT MONITOR MNDCCM
1	P24V IN A	P24V IN A	P24V OUT ⁽¹⁾	P24V OUT ⁽¹⁾	P24V OUT ⁽¹⁾	P24V OUT ⁽¹⁾
2	COM A	COM A	COM/GND	COM/GND	COM/GND	COM/GND
3	P24V IN B	P24V IN B			P48V IN	P48V IN
4	COM B	COM B			N48V IN	N48V IN
5	RLY NO (V)	RLY NO (V)	RLY NO	RLY NO (V)	RLY NO	RLY NO (V)
6	RLY COM	RLY COM	RLY COM	RLY COM	RLY COM	RLY COM
7	RLY NO (I)* (* - used for MNRPSCM only)	RLY NO (I)* (* - used for MNRPSCM only)	RLY NC	RLY NO (I)	RLY NC	RLY NO (I)

NOTE:

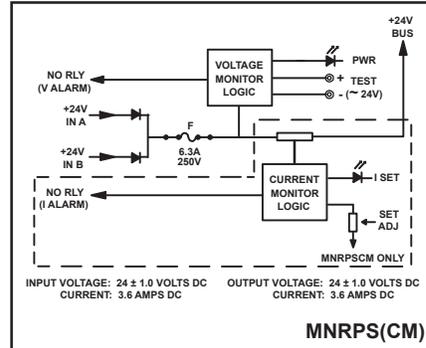
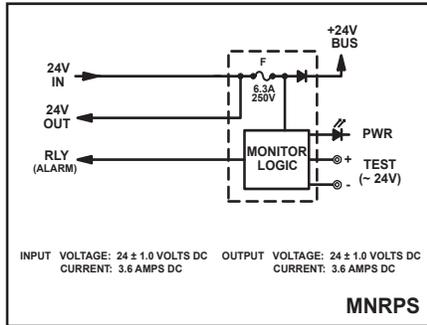
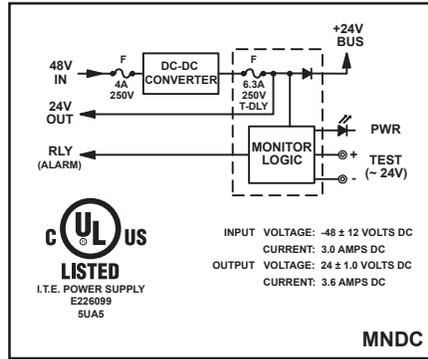
(1) 24V output on rear panel terminal block allows for daisy chain powering to other active MAXNET® chassis which utilize MAXNET remote power supplies.

Ordering Information

Part Number	Description
MNRPS	24V, 3.6A Remote Powering Unit
MNRPSCM	24V, 3.6A Remote Powering Unit with Current Monitoring
MNAC-110	110 VAC to 24V, 3.6A Diode or'd Redundant Power Supply
MNAC-110CM	110 VAC to 24V, 3.6A Power Supply with Current Monitor
MNAC-220	220 VAC to 24V, 3.6A Diode or'd Redundant Power Supply
MNAC-220CM	220 VAC to 24V DC, 3.6A Power Supply with Current Monitor
MNDC	-48 VDC to 24V, 3.6A True Load Sharing Redundant Power Supply
MNDCCM	-48 VDC to 24V, 3.6A Power Supply with Current Monitor



Functional Schematics



Functional Schematics

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MAXNET specifications are only valid when ATX plug-in pads and EQs are used.

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