

Applications in these markets demand state of the art, reliable and safe DC power systems. Astral 30 delivers an industry leading power density in its segment, many safety functions, wide operating temperature range and superb reliability in its small housing



Used in the 2U rack with controller, the Astral 30 rectifiers cover 800w to 96kW applications using a minimum of space and low heat dissipation



System Feature

MINI embedded DC power systems advanced modular design makes the whole system are small, but it can provide enough power to meet the requirements of communication systems, consistent with the characteristics of the rack-mounted. The system is suitable for all sizes of exchange room, base stations, satellite communications, data communications, railways and power systems. MINI DC power system is easy to operate, install and maintain. Module sub-rack adopts inset-box installation for flexible expansion capacity and replacement controller.



- √ Power Factor compensation technology
- √ PF : > 0.99
- √ Standard height 2U
- √ Soft Switch Technology
- √ Efficiency >95% @ 50%
- √ LVD Function to protect batteries
- √ Modular design to ensure parallel
- √ can parallel up to 64 modules
- √ Redundancy function
- √ N + X : Hot swappable technology,
- √ Standard RS232 / 485 communication interface
- √ 3-class alarm dry contact: Emergency / Main / General alarm
- √ Low radicalization: Advanced EMC rectifier design

Model Astral 30 – 800 I 1000 I 1400 I 2100

INPUT DATA

Voltage (operating range)	85 V _{AC} / - 290 V _{AC}
Frequency (nominal / range)	45 Hz – 65 Hz
Power Factor compensation technology	> 0.99 pf
Protection	Fuse Shutdown above 290 V _{AC}

OUTPUT DATA

Voltage (default)	30 V _{DC}
Voltage (adjustable range)	26.0 – 35.5 V _{DC}
Power	800 I 1000 I 1400 I 2100 W
Output current	30 I 40 I 50 I 70 Amp
Max current	41.7 A (@V _{OUT} < 24 V _{DC})
Static voltage regulation (10-100% load)	< ±0.6% or ±0.1%
Dynamic voltage regulation	± < 5.0% for 10-90% or 90-10% load variation, regulation time < 50ms
Hold up time	>20ms; output voltage > 21 V _{DC}
Ripple & Noise	< 20 mV _{PP} @ 30 MHz, < 200 mV _{PP} @ Max
Transient response recovery time	<200us max.
Transient response Overshoot range	± < 5.0%
Protection	Short circuit proof, Over/Low voltage & High temperature protection

OTHER SPECIFICATION

Peak Efficiency	95 %
Alarms (Red LED)	Low mains shutdown, High and low temperature shutdown, Rectifier Failure, Overvoltage shutdown on output, Fan failure, Low voltage alarm, CAN bus failure
Warnings (Yellow LED)	Rectifier in power de-rate mode, Remote battery current limit activated, Input voltage out of range, flashing at overvoltage
Normal (Green LED)	Input and output ok
Operating temperature (non- cond.)	- 20 – 65°C [-40 – 185°F]
Storage temperature	-40 to +85°C (-40 to +185°F), humidity 0 - 99% RH non-condensing
Dimensions [WxHxD] / Weight	88 x 103 x 261mm (2.83 x 1.63 x 8.54") / < 2.4 kg

DESIGN STANDARDS

Electrical safety	EN 60950-1:2006+A11:2009+A1:2010+A12:2011, UL 60950-1:2011
EMC	EN 61000-6-1:2007, -6-2:2005, -6-3:2007 + A1:2011, -6-4:2007 + A1:2011, TS 61000-6-5, EN 300 386:v1.6.1, FCC CFR 47 Part 15:2013

Specifications are subject to change without notice