



RSM 48/30 & 24/50

## RSM 48/30 & RSM 24/50 Modular Switched Mode Rectifier Systems



**RSM 48/30 (24/50) modular rectifier systems are an ideal powering solution for modern mid-sized communication applications.**

**Concentrated power output** RSM 48/30 (24/50) rectifier systems provide a maximum output of 120A at 48 VDC and 200A at 24 VDC in just four rack units of space. Cabinets are available in both 19" and 23" rack mounting configurations.

**Hot plug-in system expansion** The RSM's flexible, slide-in modular design enables you to upgrade your rectifiers in the field — even while the system's online — without interrupting the load. And you can expand to maximum capacity, with no increase in rack size.

**Local and remote monitoring/control** Each power module contains an intelligent computer microprocessor with built-in diagnostics that allows you to monitor and control your system from a local or remote location. The unit's front panel LCD and soft-touch keys make it easy to program various system settings and alarms, while remote computer communications are possible through an RS-232 or RS-485 serial communications interface (SCI).

**True N+1 redundancy** The RSM 48/30 multiple-module design features true redundancy, because each rectifier module has a completely regulated and isolated control architecture. In the unlikely event of a rectifier failure, the system's remaining modules automatically adjust to share the load. This protects

Available in 30A (48 VDC) and 50A (24 VDC) module capacities

Extremely compact, lightweight design

Features isolated AC input for each module

Provides outstanding conversion efficiency

Features demand-based fan cooling

Supports local and remote communications

even the most sensitive communications equipment from potentially damaging variations in voltage and current output.

**Unrivaled durability** Whether your equipment's located in a central office, cell site or roadside enclosure, RSM 48/30 rectifier systems are built to perform in the most hostile environmental conditions. Low temperature startup and high temperature operation are guaranteed through special attention to thermal design. Argus' unique demand-based cooling system automatically increases or decreases fan speed based on the unit's internal temperature.

**High quality products backed by a solid warranty** In addition to being ISO 9000 registered, Argus' manufacturing center employs a rigorous quality control program to ensure all products meet the highest quality standards. Each product is designed with only premium grade electronic components and is backed by a comprehensive factory parts and service warranty.



# RSM 48/30 & 24/50 Modular Rectifier Systems

<p><b>Power Module(s)</b></p> <p><b>Electrical</b>          Input voltage: 184 to 264 VAC          Input frequency: 47 to 63Hz          Power: 1800 watts/module (RSM 48/30)          1500 watts/module (RSM 24/50)          Power factor: &gt;0.90 lagging (displacement)          Efficiency: 90% min; 50 to 100% load (RSM 48/30)          88% min. (RSM 24/50)          Output voltage: 42 to 60 VDC (RSM 48/30)          21 to 30 VDC (RSM 24/50)          Output current: 33A (RSM 48/30)          55A (RSM 24/50)          Regulation:          Static: ±25mV, line and load (zero slope)          Dynamic: &lt;1% deviation with 50 to 100% load step          Response time: &lt;2mSec to 0.1% of output          Noise:          Voice band: &lt;22 dBrnC with battery          Wide band: &lt;10mV RMS (10kHz to 10MHz)          &lt;150mV pk to pk (10kHz to 100MHz)          EMI: See standards          Acoustic: &lt;60dBa at 1m (3 ft)          TIF: (Current): &lt;250 at 100% load</p>	<p><b>Environmental</b>          Temperature: 0° to 60°C (32° to 140°F) [standard]          -40° to 60°C (-40° to 140°F) [optional]          Humidity: 0 to 90% R.H. non-condensing          Elevation: -500 to 2800m (-1640 to 9186 ft)</p> <hr/> <p><b>Features</b>          Indicators: Module Fail          Module Status Display (OK, Minor alarm, µP reset)          2 x 16 character LCD display          Cabinet alarms: Individual Module Fail †          Group A.C. Fail †          General Alarm †          Controls: Up Adjustment/Scroll Key          Down Adjustment/Scroll Key          Enter/Select -          Float/Equalize Key          View Adjust - Up and Select          Remote controls: Equalize          Shutdown          Remote control access -Via SCI          † Jumper selectable Form A/B contacts</p>	<p>Weight: 19"/23" cabinet: 8.1 kg (18 lb.)          23" only cabinet: 9.4 kg (21 lb.)</p> <p>Connections:          Input: Box type terminal block          0.55 to 1.5mm<sup>2</sup>          (#16 to #10 AWG)          Chassis ground: Compression Lug          1.5 to 6mm<sup>2</sup>          (#16 to #10 AWG)          Output: 3/8" studs on 1" centers for up to 3/0 wire or bus bar connection          Alarms/control: Terminal block          0.55 to 1.5mm<sup>2</sup>          (#20 to #16 AWG)</p>								
<p><b>Standards</b>          The RSM 48/30 (24/50) are designed to meet the following specifications.</p>										
<p>CSA: 22.2, -107, -220, 1402          CSA-NRTL/C: 22.2, -950, -89          FCC: Part 15, Subpart B, Class A [EMI]          ANSI/IEEE: C62.41-1980 Cat B          Power line surge          IEC: CISPR 11, Class A</p>										
<p><b>Ordering Information</b>          Please consult the factory for detailed ordering information.</p>										
<p><b>Cabinets</b></p>										
<p><b>Mechanical</b>          Dimensions: 178 H x 432 (19") W or 535 (23") W x 305 D (7.0" H or 17" W or 21" W x 12" D)          Mounting: 19"/23" cabinet: fits 19" and 23" racks          Two mounting positions: flush and 6" offsets          23" only cabinet: fits 23" racks only          Mounting positions: flush and 6" offset</p>										
<p><b>Power Modules</b></p> <table border="1"> <thead> <tr> <th>Part #</th> <th>Model #</th> </tr> </thead> <tbody> <tr> <td>010-505-20</td> <td>RSM 48/30</td> </tr> <tr> <td>010-510-20</td> <td>RSM 24/50</td> </tr> </tbody> </table>			Part #	Model #	010-505-20	RSM 48/30	010-510-20	RSM 24/50		
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030-522-20	23" RSM 48/30 (4 module)									
030-530-20	19/23" RSM 24/50 (3 module)									
030-531-20	23" RSM 24/50 (4 module)									
<p><b>Mechanical</b>          Dimensions: 174 H x 130 W x 254 D mm (inches) (6.85" H x 5.1" W x 10" D)          Weight: 7.5 kg (16.5 lb.)</p>										

