



RSM 48/50 & RSM 24/100



## RSM 48/50 & RSM 24/100 Modular Switched Mode Rectifier Systems

RSM 48/50 (24/100) modular rectifier systems offer the ultimate powering solution for mid to large-sized communications applications.

**Concentrated power output** RSM 48/50 (24/100) rectifier systems provide a maximum output of 200A at 48 VDC and 400A at 24 VDC in a 23" cabinet. Similarly, a 19" cabinet supplies a maximum of 150A at 48 VDC and 300A at 24 VDC.

**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 48/50 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 even the most sensitive communications equipment from potentially damaging variations in voltage and current output.

Available in 50A (48 VDC) or 100A (24 VDC) module capacities

Offers maximum power in minimum space

Provides outstanding conversion efficiency

Intelligent microprocessor control

Optional Unity Power Factor

Supports local and remote communications

**Unrivalled durability** Whether your equipment's located in a central office, cell site or roadside enclosure, RSM 48/50 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.

**Unity Power Factor option** Unity power factor (UPF) is particularly beneficial in installations where low power factor is financially penalized by the utility power company. Other advantages of UPF include a reduction in harmonic distortion, reduced neutral current in some A.C. systems and improved A.C. generator interaction.

**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 48/50 & 24/100 Modular Switched Mode Rectifier

Power Module(s)	Environmental	Connections:												
<p><b>Electrical</b></p> <p>Input voltage: 184 to 264 VAC (non UPF) 176 to 264 VAC (UPF)</p> <p>Input frequency: 47 to 63Hz</p> <p>Power: 3000W</p> <p>Power factor: 0.90 displacement (non UPF) &gt;95% true (UPF)</p> <p>Efficiency: 90% min. (50 to 100% load) RSM 48/50 88% min. (50 to 100% load) RSM 24/100</p> <p>Output voltage: 42 to 60 VDC (RSM 48/50) 21 to 30 VDC (RSM 24/100)</p> <p>Output current: 55A (RSM 48/50) 105A (RSM 24/100)</p> <p>Regulation: Static: ±25mV, line and load (zero slope) Dynamic: &lt;1% deviation for 50 to 100% load step (RSM 48/50) &lt;2% deviation for 50 to 100% load step (RSM 24/100)</p> <p>Response time: &lt;2mSec to 0.1% of output</p> <p>Noise: Voice band: &lt;22 dBnC with batteries Wide band: &lt;10mV RMS (10kHz to 10MHz) &lt;150mV pk to pk (10kHz to 100MHz)</p> <p>EMI: See standards Acoustic: &lt;60dBa at 1m (3 ft)</p> <p>TIF: (Current) &lt;250 at 100% load (non UPF) &lt;60 with UPF option</p>	<p>Temperature: 0° to 60°C (32° to 140°F) (standard) -40° to 60°C (-40° to 140°F) (optional)</p> <p>Humidity: 0 to 90% R.H. non-condensing</p> <p>Elevation: -500 to 2800m (-1640 to 9186 ft)</p> <hr/> <p><b>Features</b></p> <p>Indicators: Module fail Module status display (OK, general alarm, µP reset) 2 x 16 character LCD display</p> <p>Cabinet alarms: Individual module fail † Group AC fail † Group general alarm †</p> <p>Controls: Up (Adjustment/Scroll) key Down (Adjustment/Scroll) key Enter/Select (Float/Equalize) key View angle adjust</p> <p>Remote controls: Group Equalize Individual Shutdown (also functions as restart) Remote communications access (via SCI)</p> <p>† Jumper selectable form A/B contacts</p>	<p>Input: Box type terminal block 2.5 to 10mm<sup>2</sup> (#14 to #8 AWG)</p> <p>Chassis ground: Compression lug 2.5 to 10mm<sup>2</sup> (#14 to #8 AWG)</p> <p>Output: 3/8" studs on 1" centers for up to 4/0 wire or bus bar connection</p> <p>Alarms/control: Terminal block 0.55 to 1.5mm<sup>2</sup> (#20 to #16 AWG)</p>												
		Standards												
		<p>The RSM 48/50 (24/100) is designed to meet the following specifications.</p> <p>CSA: 22.2, -107, -220, 1402 CSA-NRTL/C: 22.2, -950, -89 (non-UPF) -950-M93 (UPF)</p> <p>FCC: Part 15, Subpart B, Class A ANSI/IEEE: C62.41 Cat B Power line surge</p> <p>IEC: 68-2, 801-2</p>												
		Ordering Information												
		<p>Please consult the factory for detailed ordering information.</p>												
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		Cabinets												
	<p>Dimensions: 267 H x 432 W/ 541 W x 381 D mm (inches) (10.5"H x 17"W/ 21.3"W x 15"D)</p> <p>Weight: 19"/23" cabinet: 14.4 kg (32 lb.) 23" only cabinet: 16.2 kg (36 lb.)</p> <p>Mounting: 19"/23" cabinet: Fits all 19" and 23" racks, center or flush mount (3 module) 23" only cabinet: Fits 23" racks only. Separate cabinets for center or flush mount (4 module)</p>	<p><b>Cabinets</b></p> <table border="1"> <tbody> <tr> <td>030-501-20</td> <td>23" center mount RSM 48/50 (4 module)</td> </tr> <tr> <td>030-502-20</td> <td>23" center mount RSM 24/100 (4 module)</td> </tr> <tr> <td>030-505-20</td> <td>19/23" RSM 48/50 (3 module)</td> </tr> <tr> <td>030-506-20</td> <td>19/23" RSM 24/100 (3 module)</td> </tr> <tr> <td>030-507-20</td> <td>23" flush mount RSM 48/50 (4 module)</td> </tr> <tr> <td>030-508-20</td> <td>23" flush mount RSM 24/100 (4 module)</td> </tr> </tbody> </table>	030-501-20	23" center mount RSM 48/50 (4 module)	030-502-20	23" center mount RSM 24/100 (4 module)	030-505-20	19/23" RSM 48/50 (3 module)	030-506-20	19/23" RSM 24/100 (3 module)	030-507-20	23" flush mount RSM 48/50 (4 module)	030-508-20	23" flush mount RSM 24/100 (4 module)
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<p><b>Mechanical</b></p> <p>Dimensions: 262 H x 132 W x 343 D mm (inches) (10.3"H x 5.2"W x 13.5"D)</p> <p>Weight: Non-UPF Module: 12.2 kg (27 lb.) UPF Module: 10.8 kg (24 lb.)</p>		<p>Due to continuing product improvements, Argus reserves the right to change specifications without notice.</p>												