



# Pathfinder® 1.5kW Modular Switched Mode Rectifier Systems

Argus' complete and innovative family of communications-grade rectifiers offers more power at the lowest cost.

**More power at a reduced price** When it comes to rectifiers, Argus has always been the industry's leading innovator. That's why the Pathfinder series offers more power at a lower cost than ever before. Years of research and customer consultation has enabled Argus to develop a more cost effective rectifier that meets the complex demands of today's advanced digital communications equipment.

**New package, more features** You'll notice right away that the Pathfinder Series looks different than other rectifiers. Its sleek profile incorporates an advanced switching technology which reduces the unit's total number of components. The result is a new generation of rectifier with a higher performance and reliability rating than other rectifiers.

**Easier access to wiring and connectors** Argus has designed Pathfinder with an open cabinet and two universal DC bus bars to accommodate the wide variety of wiring and termination options in modern communications power systems. Load, alarm, distribution and battery connections have never been this easy.

**Hot swappable modules** Expansion is worry-free with Pathfinder's hot swappable, front access design. Operators never have to interrupt service as the power modules slide easily in or out of the cabinet even while the system is online.

Max. power output of 1500W per module

Available in 33A (48 VDC) & 60A (24VDC)

Unique power limiting function

Wide range AC input

Front access maintenance

Optimized for the SM series of controllers

Unity power factor input

### Better protection from power disturbances

Pathfinder's design uses durable, field-replaceable metal oxide varistors (MOVs) to withstand lightning strikes. A wider range of AC input provides protection from power line disturbances and avoids nuisance alarms. Used in combination with high interrupting capacity fast acting fuses, this translates into better overall reliability of the power system and fewer callouts.

### Centralized supervision and control

With Pathfinder, the optional SM series of supervisory panels act as the main operator interface. That means rectifier setup, adjustment and control is a single-step process that occurs from one centralized, easy-to-use source. It also means that Pathfinder can take advantage of the many features available with the SM panels, including remote communications access. An optional built-in LCD and control interface for each Pathfinder module is also available.

**Improved specifications** Even with its reduced price, Pathfinder has better performance specifications than comparable rectifier products. Significant improvements have been made in the unit's temperature operating range, power factor, and MTBF rating to name just a few.



## Pathfinder® Series Modular Switched Mode Rectifier

Power Module(s)	Features	Cabinet(s)
<p><b>Electrical</b></p> <p>Input voltage:            Nominal: 208-240 VAC            Operating: 176 to 275 VAC            Extended: 90 to 312 VAC (derated)</p> <p>Input frequency: 45 to 70Hz</p> <p>Power: 1500W</p> <p>Power factor: &gt;.99 (50-100% load)</p> <p>Efficiency: &gt;90% (50-100% load) &gt;85% (25-100% load)</p> <p>Output voltage: 42 to 60 VDC (48V) 21 to 30 VDC (24V)</p> <p>Output current: 33A per 48V module (max.) 60A per 24V module</p> <p>Regulation: -0.2% ±25mV, line and (static) load at 0.2% slope</p> <p>Transient response: &lt;1% deviation and &lt;2msec to 0.1% of output for 50 to 100% load step</p> <p>Noise:            Voice band: &lt;22 dBmC with batteries            Wide band: &lt;10mV RMS (to 10MHz) &lt;150mV pk to pk (to 100MHz)</p> <p>EMI:            Acoustic: &lt;60dBa at 1m (3 ft)</p> <p>TIF: (Current) &lt;120 at 100% load</p>	<p><b>Indicators:</b> 1- AC mains OK - green LED 2- Module OK - green LED 3- Module fail - red LED 2x16 character LCD (optional)</p> <p><b>Cabinet alarms:</b>            Rectifier major alarm contacts            Rectifier minor alarm contacts            AC Mains fail alarm contacts            General alarm</p> <p><b>Controls:</b> On/off pushbutton Remote equalize Individual remote shutdown RS-485 remote interface Up arrow key (adjust/scroll) Down arrow key (adjust/scroll) Enter/select arrow key</p> <p><b>Adjustments (via SM Series):</b>            Float and equalize voltage            Battery test voltage            High and low voltage alarms            High voltage shutdown            Current limit            Start delay time            Slope %</p> <p><b>Protection:</b> Current limit/short circuit Input/output fuses Output high voltage shutdown Output power limiting Thermal foldback/shutdown Input transient AC low line foldback/shutdown AC high voltage shutdown</p> <p>Heat dissipation: 460 BTU/hr typical</p>	<p><b>Connections</b></p> <p>Input: Box type pluggable terminal 2.5 to 4mm (#14 to 12 AWG)</p> <p>Output: Bus adapters with 3/8" threaded inserts, 1" centers</p> <p>Chassis ground: Compression lug 2.5 to 25mm (#14 to 4 AWG)</p> <p>Alarms/control: Box type pluggable terminal 0.45 to 2.5mm (#22 to 14 AWG)</p> <p>SM series interface: RJ 12 offset</p> <hr/> <p><b>19" Cabinet (3 Modules)</b>            Dimensions: 133H x 432W x 338D mm (in.) (5.25"H x 17"W x 13.3"D)</p> <p>Weight: 7.26 kg (16 lb.)</p> <p>Mounting: Fits 19"/23" rack flush/center mount</p> <hr/> <p><b>23" Cabinet (4 Modules)</b>            Dimensions: 133H x 541W x 338D mm (in.) (5.25"H x 21"W x 13.3"D)</p> <p>Weight: 8.6 kg (19 lb.)</p> <p>Mounting: Fits 23" racks only flush/center mount</p>
<p><b>Mechanical</b></p> <p>Dimensions: 130 H x 130 W x 307 D mm (inches) (5.1"H x 5.1"W x 12.1"D)</p> <p>Weight: 5.67 kg (12.5 lb.)</p>	<p><b>Standards</b>            The Pathfinder 1.5kW is designed to meet the following:</p> <p>CSA: C22.2 N° 950-95            UL: 1950-1995 (under NRTL)            CE: EN 60950-93 Amend 1-4            FCC: Part 15, Class B            ICES-003: Class B            ANSI/IEEE: C62.41:1991 Cat B3            EMC            Emissions: EN 55022 Class B            EN 61000-3-2            Immunity: EN 61000-4-2 to -6            EN 61000-4-11            ENV 50204</p>	<p style="background-color: #0056b3; color: white; padding: 5px;"><b>Ordering Information</b>            Please consult the factory for detailed ordering information.</p>
<p><b>Environmental</b></p> <p>Temperature:            Operating: -40° to 65°C (-40° to 149°F)            Storage: -55° to 85°C (-67° to 185°F)</p> <p>Humidity: 0 to 95% R.H. non-condensing</p> <p>Elevation: -500 to 2800m (-1640 to 9186 ft)</p>		<p><b>Part # Description</b></p> <p><b>Power Modules:</b>            010-548-20 Pathfinder 48V-1.5kW            010-549-20 Pathfinder 24V-1.5kW</p> <p><b>Cabinets:</b>            030-633-20 19" cabinet            030-634-20 23" cabinet</p>

Due to continuing product improvements, Argus reserves the right to change specifications without notice.

**Argus Technologies Ltd.**

5700 Sidley Street  
 Burnaby, B.C. V5J 5E5  
 Canada  
 Tel: (604) 436-5900  
 Fax: (604) 436-1233

Email: sales@argusdcpower.com Web site: www.argusdcpower.com

**Argus Technologies Inc.**

3886 Hammer Drive  
 Bellingham, WA  
 98226-7629 U.S.A.  
 Tel: (360) 671-7054  
 Fax: (360) 671-7096

ISO 9002 registered

