



## Pathfinder® 10kW Modular Switched Mode Rectifier Systems

**Argus' new generation of innovative, communications-grade rectifiers just got more powerful.**

**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 results in an ultra compact rectifier with a higher performance and reliability rating.

**A high power modular rectifier** - such as the Pathfinder 48V-10kW - is designed to supply maximum output power in the minimum of rack space for high capacity power plant applications.

**Installation and expansion** is made simple with Pathfinder's hot swappable, front access design; facilitates all cable connections to cabinet. AC alarms, control and DC connections are made via rear mounted terminals for easy cable or busswork routing.

Ultra compact 5.25" rack space (3 R.U.)

Available in 48 VDC, 10kW of output power

Unique power limiting feature

Wide range 3-phase AC input

Front access

Modular installation and expansion

Standard 19" & 23" rack mounting

**Remote communications** can be achieved with the optional Argus SM series of supervisory panels. Rectifier setup adjustment and control becomes a single-step process that occurs from one centralized, easy-to-use source.

**Better protection from power disturbances** Pathfinder's design uses durable, field-replaceable metal oxide varistors (MOVs) to protect against lightning strikes. A wider range 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 less callouts.

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



## Pathfinder® Series Modular Switched Mode Rectifier

Power Module(s)		Cabinets								
<p><b>Electrical</b></p> <p>Input voltage, Delta connected            Nominal: 208-240 VAC 3<math>\phi</math>, 3 wire,            Operating: 187 to 294 VAC            Extended: 88 to 305 VAC (derated)</p> <p>Input voltage, Wye connected            Nominal: 380-480 VAC 3<math>\phi</math>, 4 wire,            Operating: 324 to 509 VAC            Extended: 152 to 528 VAC (derated)</p> <p>Input frequency: 45 to 70Hz</p> <p>Power: 10kW min. continuous            50 to 55 VDC</p> <p>Power factor: &gt;.99 true (50-100% load)            (208 to 277 and            360 to 480 VAC)</p> <p>Efficiency: 90% at all nominal <math>V_{in}</math>            (75 to 100% load)</p> <p>Output voltage: 42 to 60 VDC</p> <p>Output current: 182 ADC @ 55 VDC            200 ADC @ 50 VDC            235 ADC @ 42 VDC</p> <p>Regulation: -0.2% <math>\pm</math>25mV, line and            load at 0.2% slope (static)</p> <p>Transient response: &lt;1% deviation and            &lt;2msec to 0.1% of output            for 50 to 100% load step            &lt;2% deviation            for 10 to 90% load step</p> <p>Noise:            Voice band: &lt;22 dB<sub>BrnC</sub> 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;120 at 100% load</p>	<p><b>Mechanical</b>            Dimensions: 129 H x 533 W x 505 D            mm (inches) (5.1" H x 21.0" W x 19.9" D)</p> <p>Weight: 31.3 kg (69 lb.)</p> <hr/> <p><b>Environmental</b>            Temperature: -40° to 60°C (-40° to 140°F)</p> <p>Humidity: 0 to 95% R.H.            non-condensing</p> <p>Elevation: -500 to 2800m            (-1640 to 9186 ft)</p> <hr/> <p><b>Features</b>            Indicators: 1- AC mains OK - green LED            2- Module OK - green LED            3- Module fail - red LED            2x16 character LCD (option)</p> <p>Cabinet alarms:            Module fail alarm contacts</p> <p>Remote controls:            Remote equalize            Remote shutdown            RS-485 interface</p> <p>Local controls:            Up arrow key (adjust/scroll)            Down arrow key (adjust/scroll)            Enter/select arrow key            On/off pushbutton</p> <p>Adjustments:            Float voltage            Equalize voltage            High voltage alarm            Low voltage alarm            High voltage shutdown            Current limit            Slope            Start delay</p> <p>Protection: Current limit/short circuit            Input/output fuses            Output high voltage shutdown            Power limiting            Thermal foldback/shutdown            Input transient            AC low line foldback/shutdown            AC high voltage protection</p>	<p>Dimensions: 133H x 533W x 511D            mm (inches) (5.25" H x 21.0" W x 20.1" D)</p> <p>Weight: 7.8 kg (17.2 lb.)</p> <p>Mounting:            Horizontal Cabinet            23" flush/offset/center mounting for            single module</p> <p>Connections:            Input: Box type terminal block            2.5 to 10mm<sup>2</sup> (#14 to 6 AWG)            Chassis ground:            Compression lug            2.5 to 35mm<sup>2</sup> (#14 to 2 AWG)</p> <p>Output: 3/8" threaded inserts            on 1" centers</p> <p>Alarms/control:            Terminal block            0.55 to 1.5mm<sup>2</sup> (#26 to 14 AWG)</p> <p>SM communication: RJ 12 offset</p> <hr/> <p><b>Standards</b>            The Pathfinder 10kW is designed to meet            the following specifications.</p> <p>CSA: 22.2 N° 950-95 (to NRTL/C)            UL: 1950-1995 (under NRTL)            CE: EN60950-93 Amend. 1-4            FCC: Part 15, Class A            EN55022: Class A (CISPR 22)            ANSI/IEEE: C62.41 Category B3            ICES-003: Class A</p> <hr/> <p><b>Ordering Information</b>            Please consult the factory for detailed            ordering information.</p> <p><b>Power Modules</b></p> <table border="1"> <thead> <tr> <th>Part #</th> <th>Model #</th> </tr> </thead> <tbody> <tr> <td>010-547-20</td> <td>Pathfinder 48V-10kW</td> </tr> </tbody> </table> <p><b>Cabinets</b></p> <table border="1"> <tbody> <tr> <td>030-617-20</td> <td>23" cabinet</td> </tr> <tr> <td>030-618-20</td> <td>19" cabinet</td> </tr> </tbody> </table>	Part #	Model #	010-547-20	Pathfinder 48V-10kW	030-617-20	23" cabinet	030-618-20	19" cabinet
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Due to continuing product improvements, Argus reserves the right to change specifications without notice.