



Pathfinder® Series



Pathfinder® 3kW Modular Switched Mode Rectifier Systems

From the pioneer in DC power systems comes a new generation of innovative, communications-grade rectifiers.

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 actually 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 products.

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 module's slide easily in or out of the cabinet even while the system's online.

- Max. power output of 3kW per module
- Available in 55A (48 VDC) & 110A (24VDC)
- Unique power limiting function
- Wide range AC input
- Total front access
- Optimized for the SM series of controllers
- Provides unity power factor

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 fast acting fuses, this translates into better overall reliability of the power system and a higher interrupting capacity resulting in less 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 control interface for each Pathfinder module is also available.

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 MTBF rating to name just a few.



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Power Module(s)		
<p>Electrical</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: 3000W</p> <p>Power factor: >.99 (50-100% load)</p> <p>Efficiency: 90% at full load (48V) 88% at full load (24V)</p> <p>Output voltage: 42 to 60 VDC (48V) 21 to 31.5 VDC (24V)</p> <p>Output current: 70A per 48V module (max.) 125A per 24V module</p> <p>Regulation: -0.2% ±25mV, line and (static) load at 0.2% slope</p> <p>Transient response: <1% deviation and <2msec to 0.1% of output for 50 to 100% load step (Pathfinder 48V-3kW) <2% deviation and <2msec to 0.2% of output for 50 to 100% load step (Pathfinder 24V-3kW)</p> <p>Noise: Voice band: <22 dBnC with batteries Wide band: <10mV RMS (10kHz to 100MHz) <150mV pk to pk (10kHz to 100MHz)</p> <p>EMI: Acoustic: <60dBa at 1m (3 ft)</p> <p>TIF: (Current) <100 at 100% load</p>	<p>Humidity: 0 to 95% R.H. non-condensing</p> <p>Elevation: -500 to 2800m (-1640 to 9186 ft)</p> <hr/> <p>Features</p> <p>Indicators: 1- AC mains OK - green LED 2- Module OK - green LED 3- Module fail - red LED Optional 2x16 character LCD</p> <p>Cabinet alarms: Module fail alarm contacts</p> <p>Controls (standard): Power on/off button Remote equalize RS-485</p> <p>Controls (with optional LCD): Up arrow key (adjust/scroll) Down arrow key (adjust/scroll) Enter/select arrow key Remote shutdown</p> <p>Adjustments (via SM Series): Float Equalize High voltage alarm Low voltage alarm Current limit Slope Start delay High voltage shutdown</p> <p>Protection: Current limit/short circuit Start delay Input/output fuses High voltage shutdown Power limiting Thermal foldback/protection Input transient AC low line foldback</p>	<p>Mounting: 19" cabinet: Fits 19" rack flush/center mount (3 modules) Fits 23" rack center mount only 23" cabinet: Fits 23" racks only (4 modules) flush/center mount</p> <p>Connections: Input: Box type terminal block 2.5 to 10mm² (#14 to 8 AWG)</p> <p>Output: Bus adapters with 3/8" studs on 1" centers</p> <p>Chassis ground: Compression lug 2.5 to 10mm² (#14 to 8 AWG)</p> <p>Alarms/control: Terminal block 0.55 to 1.5mm² (#20 to 16 AWG)</p> <p>SM communication: RJ 12 offset</p>
Cabinets		
<p>Mechanical</p> <p>Dimensions: 246 H x 130 W x 305 D mm (inches) (9.7"H x 5.1"W x 12.0"D)</p> <p>Weight: 9.6 kg (21 lb.)</p>	<p>Dimensions: 267H x 432/541W x 381D mm (inches) (10.5"H x 17"/21"W x 15"D)</p> <p>Weight: 19"/23" cabinet: 14 kg (32 lb.) 23" only cabinet: 16 kg (36 lb.)</p>	<p>Standards The Pathfinder 3kW is designed to meet the following specifications.</p> <p>CSA: 22.2 N° 950-95 (to NRTL/C) UL: 1950-3rd ed. (under NRTL) CE: EN60950-93 Amend 1&2 FCC: Part 15, Subpart B, Class B CISPR 22: Class B (EN55022) EN60555-2: Harmonic disturbances IEC: 801, -2, -3, -4, -5 ANSI/IEEE: C62.41 Cat B</p>
Ordering Information Please consult the factory for detailed ordering information.		<p>Part # Description</p> <p>Power Modules: 010-537-20 Pathfinder 48V-3kW 010-539-20 Pathfinder 24V-3kW</p> <p>Cabinets: 030-577-20 23" cabinet 030-594-20 19" cabinet</p>

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