

**BD1500W Series Dehydrators**

Max Capacity 1500 SCFD (1770L/h), Output Pressure 2 to 15PSI (13.8 to 103.4KPa) or 0.3 to 7.5 PSI (2.1 to 51.7 KPa) Field Adjustable, Single Pressure Outlet, with Real-Time Remote Management

PRODUCT DESCRIPTION

The dehydrator removes the moisture from damp ambient air to deliver a reliable, constant, on-demand source of dry and pressurised air, which is critical to prevent the systems from performance and reliability degradation by condensation.

The BD1500W series dehydrators offer pressurization solutions to transmission lines and antennas in both telecom and broadcasting applications. Its low pressure models (suffix LP) are suitable for applications where reduced pressure is required, for example, pressurisation of broadcast antenna radomes, microwave waveguides and other transmission lines.

The inherent reliability of the BD series design, combined with the high output capacity and remote real-time data capabilities make these units an ideal choice for pressurisation of systems at unattended sites.

The BD1500W Series dehydrators employ a fully digital operating platform offering the most accurate readings of operating variables, either from the front panel or by a remote IP connection.

FEATURES / BENEFITS

- Air Delivery up to 1500 SCFD (1770L/h)
- Operating pressure can be changed by a simple adjustment at the dehydrator
- Available in 110VAC or 220VAC Power Supply
- Remote Real-Time Data and Alarm Reset Capabilities
- SNMP Communication Compatible
- Digital Display of All Operating Parameters
- Imperial and Metric Unit of Measure Options
- 8,000 Hour Maintenance Interval
- Compact and Lightweight
- Versatile Installation, Standalone, Optional Rack/Wall Mount
- Ultra Quiet Compressor



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DETAILS

| | | |
|--------------|--|----------------------|
| Product Type | | Automatic Dehydrator |
|--------------|--|----------------------|

SPECIFICATIONS

| | | BD1500W | BD1500WLP | BD1502W | BD1502WLP |
|---|-------------|--|-----------------------------|--------------------------|-----------------------------|
| Output Capacity | l/hr (SCFD) | Normal: 1416 (1200) Continuous Maximum: 1770 (1500) Emergency | | | |
| Power Requirement | | 110 - 125 VAC, 50 / 60Hz (15 Amp service recommended) | | 208 - 253 VAC, 50 / 60Hz | |
| Operating Current | A | 7 | | 3.5 | |
| Outlet Pressure Range | kPa (PSIG) | 13.8 - 103.4 (2 - 15) | 2.07 - 51.71 (0.3 - 7.5) | 13.8 - 103.4 (2 - 15) | 2.07 - 51.71 (0.3 - 7.5) |
| Outlet Air Relative Humidity | | Less than 2% RH | | | |
| Compressor Type | | Two-cylinder, 3/4 HP, Oil-less Type | | | |
| Dehydrating Method | | Heatless Desiccant | | | |
| Environment Operating Temperature Range | °C (°F) | 5°-30° (40°-85°) Ambient | | | |
| Noise Level at 3m (10ft) | dBA | 48 | | | |
| Alarms | | Low pressure, High pressure, Humidity, Excess run-time, High duty cycle, High internal temperature, and Maintenance reminder | | | |
| Outlet Connections | | Single, 3/8" Press-to-Lock tube fitting | | | |
| Dimensions Depth x Width x Height | cm (in) | 30.5 x 43.8 x 68.6 (12 x 17.25 x 27) | | | |
| Weight | kg (lb) | 36.3 (80) | | | |
| Network Management | | via Web Browser or SNMP through RJ-45 Ethernet Connection | | | |

ACCESSORIES

| Kit Number | | Description |
|------------|----------|--|
| GLK-1 | [Note 1] | Gas Line and accessories kit for BD Series dehydrators |
| P011910 | | 6 Month Maintenance Kit |
| P012252 | | 8000 Hour Maintenance Kit |
| P011674 | | Universal Rack Mounting Kit |
| P011773 | | Wall Mounting Kit |

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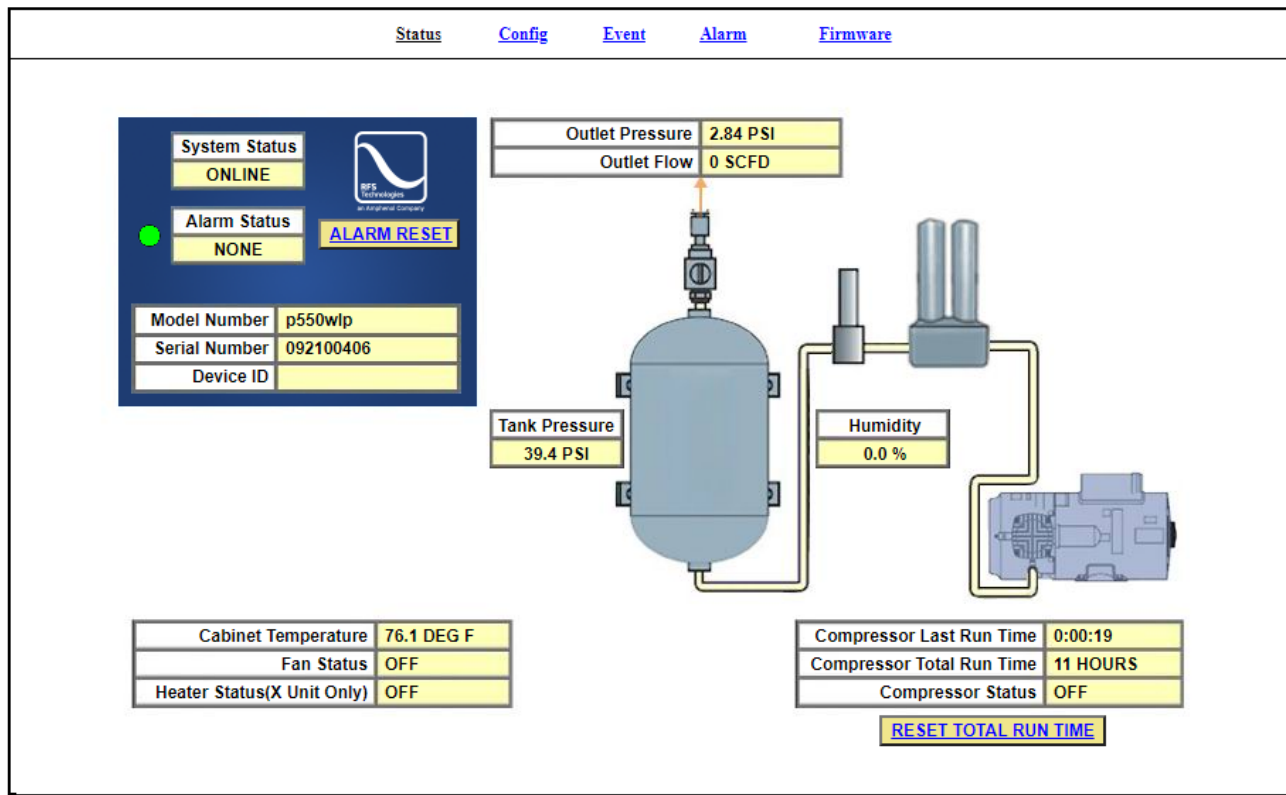
ADDITIONAL ACCESSORIES

| Model | | Description |
|----------|----------|---|
| MLK-2 | [Note 3] | 2-Port Manifold Start-Up Kit |
| PWM2G | [Note 3] | 2-Port Manifold with Pressure Gauges |
| PWM2GC | [Note 2] | 2-Port Manifold with Pressure Gauges & Check Valves |
| MLK-4 | [Note 3] | 4-Port Manifold Start-Up Kit |
| PWM4G | | 4-Port Manifold with Pressure Gauges |
| PWM4GC | [Note 2] | 4-Port Manifold with Pressure Gauges & Check Valves |
| MLK-8 | [Note 3] | 8-Port Manifold Start-Up Kit |
| PWM8G | | 8-Port Manifold with Pressure Gauges |
| PWM8GC | [Note 2] | 8-Port Manifold with Pressure Gauges & Check Valves |
| P8741SFM | | Single Pipe Panel |
| P8741DFM | | Dual Pipe Panel |
| PFMP2310 | | 10-Line Flow Distribution Panel |

Note:

1. GLK-1 Kit contains fittings and valves of a single line 3/8" tubing system. It includes 1/8 NPT Gas inlet port for RF connector, Street Tee, Ball Valve, 0-15 PSI Gauge, 50' of 3/8" tube, Teflon tape and other valves, A 1/2" to 3/8" adaptor is also included for BD4200 and BD8400 series.
2. Manifold units with check valves are not recommended for pressurising antennas with dual feedlines.
3. MLK Kit works with corresponding PWM manifold to distribute gases to multiply lines through 3/8' tubing system.

For details of accessories, refer separate datasheet.





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Screen image showing remote display of dehydrator status and alarms

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| Dehydrator Sizing Chart | Model | BD210W Series | BD550W Series | BD1500W Series | BD4200W Series | BD8400W Series |
|-------------------------|-----------------------------------|-----------------------------------|---------------|----------------|----------------|----------------|
| Altitude (Feet) | Max Flow (SCFM) | 0.14 | 0.38 | 1.04 | 2.92 | 5.83 |
| Sea Level | Max Flow (SCFD) | 200 | 550 | 1500 | 4200 | 8400 |
| 1.00 | Max Volume (FT ³) | 70 | 192 | 525 | 1469 | 2938 |
| | Cross Area (FT ² / FT) | Estimated Max Length of Line (FT) | | | | |
| HCA38 3/8" Coaxial | 0.0012 | 60,830 | 167,285 | 456,232 | 1,277,449 | 2,554,899 |
| HCA12 1/2" Coaxial | 0.0014 | 48,580 | 133,595 | 364,351 | 1,020,185 | 2,040,371 |
| HCA58 5/8" Coaxial | 0.0027 | 25,718 | 70,727 | 192,892 | 540,098 | 1,080,196 |
| HCA78 7/8" Coaxial | 0.0048 | 14,543 | 39,995 | 109,078 | 305,419 | 610,838 |
| HCA118 1-1/8" Coaxial | 0.0081 | 8,636 | 23,750 | 64,773 | 181,366 | 362,732 |
| HCA158 1-5/8" Coaxial | 0.0154 | 4,542 | 12,492 | 34,069 | 95,393 | 190,787 |
| HCA214 2-1/4" Coaxial | 0.0227 | 3,081 | 8,474 | 23,113 | 64,716 | 129,433 |
| HCA300 3" Coaxial | 0.0371 | 1,885 | 5,185 | 14,141 | 39,597 | 79,195 |
| HCA400 4" Coaxial | 0.0516 | 1,355 | 3,728 | 10,167 | 28,470 | 56,940 |
| HCA495 5" Coaxial | 0.0839 | 833 | 2,292 | 6,253 | 17,509 | 35,019 |
| HCA550 5-1/2" Coaxial | 0.1380 | 506 | 1,394 | 3,801 | 10,645 | 21,290 |
| HCA618 6-1/8" Coaxial | 0.1840 | 380 | 1,045 | 2,851 | 7,984 | 15,968 |
| HCA800 8" Coaxial | 0.3250 | 215 | 591 | 1,614 | 4,520 | 9,040 |
| HCA900 9" Coaxial | 0.4320 | 161 | 445 | 1,214 | 3,400 | 6,801 |
| 1-5/8" Rigid Coaxial | 0.0103 | 6,791 | 18,677 | 50,938 | 142,627 | 285,255 |
| 3-1/8" Rigid Coaxial | 0.0405 | 1,727 | 4,750 | 12,954 | 36,273 | 72,546 |
| 4-1/16" Rigid Coaxial | 0.0685 | 1,021 | 2,808 | 7,659 | 21,446 | 42,892 |
| 6-1/8" Rigid Coaxial | 0.1580 | 442 | 1,217 | 3,320 | 9,297 | 18,595 |
| 7-3/16" Rigid Coaxial | 0.2450 | 285 | 785 | 2,141 | 5,996 | 11,992 |
| 8-3/16" Rigid Coaxial | 0.3200 | 218 | 601 | 1,639 | 4,590 | 9,181 |
| 9-3/16" Rigid Coaxial | 0.3580 | 195 | 537 | 1,465 | 4,103 | 8,207 |
| E 30 Waveguide | 0.0457 | 1,529 | 4,205 | 11,468 | 32,113 | 64,226 |
| E 38 Waveguide | 0.0252 | 2,777 | 7,637 | 20,830 | 58,325 | 116,650 |
| ES 46 Waveguide | 0.0170 | 4,113 | 11,311 | 30,850 | 86,380 | 172,760 |
| E 46 Waveguide | 0.0181 | 3,868 | 10,638 | 29,013 | 81,238 | 162,477 |
| E 58 Waveguide | 0.0116 | 6,017 | 16,548 | 45,132 | 126,371 | 252,742 |
| E 60 Waveguide | 0.0110 | 6,371 | 17,522 | 47,787 | 133,804 | 267,609 |
| E 65 Waveguide | 0.0089 | 7,830 | 21,533 | 58,726 | 164,434 | 328,869 |
| E 70 Waveguide | 0.0078 | 9,026 | 24,822 | 67,698 | 189,556 | 379,113 |
| E 78 Waveguide | 0.0065 | 10,831 | 29,787 | 81,238 | 227,468 | 454,936 |
| E 100 Waveguide | 0.0041 | 17,102 | 47,032 | 128,271 | 359,160 | 718,320 |
| E 105 Waveguide | 0.0033 | 20,964 | 57,653 | 157,236 | 440,261 | 880,522 |
| E 130 Waveguide | 0.0026 | 27,079 | 74,468 | 203,096 | 568,670 | 1,137,341 |
| E 150 Waveguide | 0.0019 | 36,106 | 99,291 | 270,795 | 758,227 | 1,516,454 |
| E 185 Waveguide | 0.0012 | 59,082 | 162,477 | 443,119 | 1,240,735 | 2,481,471 |
| E 220 Waveguide | 0.0009 | 81,238 | 223,406 | 609,289 | 1,706,011 | 3,412,023 |
| E 250 Waveguide | 0.0006 | 108,318 | 297,875 | 812,386 | 2,274,682 | 4,549,364 |
| E 380 Waveguide | 0.0003 | 216,636 | 595,750 | 1,624,773 | 4,549,364 | 9,098,729 |

Dehydrator Capacity Chart in Imperial Units

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| Dehydrator Sizing Chart | Model | BD210W Series | BD550W Series | BD1500W Series | BD4200W Series | BD8400W Series |
|-------------------------|-------------------------------|----------------------------------|---------------|----------------|----------------|----------------|
| Altitude (meters) | Max Flow (SCMM) | 0.0040 | 0.0108 | 0.0295 | 0.0826 | 0.1653 |
| Sea Level | Max Flow (SCMD) | 5.7 | 15.6 | 42.5 | 119 | 238 |
| 1.00 | Max Volume (m ³) | 1.993 | 5.455 | 14.863 | 41.615 | 83.230 |
| | Max Volume (cm ³) | 1,993,335 | 5,455,443 | 14,862,584 | 41,615,235 | 83,230,470 |
| | Max Volume (l) | 1,993 | 5,455 | 14,863 | 41,615 | 83,230 |
| | Cross Area (l/m) | Estimated Max Length of Line (m) | | | | |
| HCA38 3/8" Coaxial | 0.107 | 18,657 | 51,062 | 139,112 | 389,514 | 779,029 |
| HCA12 1/2" Coaxial | 0.134 | 14,900 | 40,779 | 111,096 | 311,070 | 622,141 |
| HCA58 5/8" Coaxial | 0.253 | 7,888 | 21,588 | 58,815 | 164,684 | 329,369 |
| HCA78 7/8" Coaxial | 0.447 | 4,460 | 12,208 | 33,259 | 93,127 | 186,254 |
| HCA118 1-1/8" Coaxial | 0.753 | 2,648 | 7,249 | 19,750 | 55,301 | 110,603 |
| HCA158 1-5/8" Coaxial | 1.431 | 1,393 | 3,813 | 10,388 | 29,087 | 58,174 |
| HCA214 2-1/4" Coaxial | 2.109 | 945 | 2,586 | 7,047 | 19,733 | 39,466 |
| HCA300 3" Coaxial | 3.447 | 578 | 1,582 | 4,312 | 12,073 | 24,147 |
| HCA400 4" Coaxial | 4.794 | 415 | 1,138 | 3,100 | 8,681 | 17,362 |
| HCA495 5" Coaxial | 7.795 | 255 | 699 | 1,906 | 5,339 | 10,678 |
| HCA550 5-1/2" Coaxial | 12.821 | 155 | 425 | 1,159 | 3,245 | 6,491 |
| HCA618 6-1/8" Coaxial | 17.094 | 116 | 319 | 869 | 2,434 | 4,868 |
| HCA800 8" Coaxial | 30.194 | 66 | 180 | 492 | 1,378 | 2,756 |
| HCA900 9" Coaxial | 40.134 | 49 | 135 | 370 | 1,036 | 2,073 |
| 1-5/8" Rigid Coaxial | 0.957 | 2,083 | 5,701 | 15,531 | 43,489 | 86,979 |
| 3-1/8" Rigid Coaxial | 3.763 | 529 | 1,449 | 3,950 | 11,060 | 22,120 |
| 4-1/16" Rigid Coaxial | 6.364 | 313 | 857 | 2,335 | 6,539 | 13,078 |
| 6-1/8" Rigid Coaxial | 14.679 | 135 | 371 | 1,012 | 2,835 | 5,670 |
| 7-3/16" Rigid Coaxial | 22.761 | 87 | 239 | 652 | 1,828 | 3,656 |
| 8-3/16" Rigid Coaxial | 29.729 | 67 | 183 | 499 | 1,399 | 2,799 |
| 9-3/16" Rigid Coaxial | 33.259 | 59 | 164 | 446 | 1,251 | 2,502 |
| E 30 Waveguide | 4.250 | 469 | 1,283 | 3,497 | 9,791 | 19,583 |
| E 38 Waveguide | 2.340 | 851 | 2,331 | 6,351 | 17,784 | 35,568 |
| ES 46 Waveguide | 1.580 | 1,261 | 3,452 | 9,406 | 26,338 | 52,677 |
| E 46 Waveguide | 1.680 | 1,186 | 3,247 | 8,846 | 24,770 | 49,541 |
| E 58 Waveguide | 1.080 | 1,845 | 5,051 | 13,761 | 38,532 | 77,065 |
| E 60 Waveguide | 1.020 | 1,954 | 5,348 | 14,571 | 40,799 | 81,598 |
| E 65 Waveguide | 0.830 | 2,401 | 6,572 | 17,906 | 50,138 | 100,277 |
| E 70 Waveguide | 0.720 | 2,768 | 7,577 | 20,642 | 57,798 | 115,597 |
| E 78 Waveguide | 0.600 | 3,322 | 9,092 | 24,770 | 69,358 | 138,717 |
| E 100 Waveguide | 0.380 | 5,245 | 14,356 | 39,112 | 109,513 | 219,027 |
| E 105 Waveguide | 0.310 | 6,430 | 17,598 | 47,943 | 134,242 | 268,485 |
| E 130 Waveguide | 0.240 | 8,305 | 22,731 | 61,927 | 173,396 | 346,793 |
| E 150 Waveguide | 0.180 | 11,074 | 30,308 | 82,569 | 231,195 | 462,391 |
| E 185 Waveguide | 0.110 | 18,121 | 49,594 | 135,114 | 378,320 | 756,640 |
| E 220 Waveguide | 0.080 | 24,916 | 68,193 | 185,782 | 520,190 | 1,040,380 |
| E 250 Waveguide | 0.060 | 33,222 | 90,924 | 247,709 | 693,587 | 1,387,174 |
| E 380 Waveguide | 0.030 | 66,444 | 181,848 | 495,419 | 1,387,174 | 2,774,349 |

Dehydrator Capacity Chart in Metri Units

External Document Links

[BD1500W Series User Guide](#)[Dehydrator Start-up Kits and Accessory Datasheet](#)[Dehydrator Sizing Reference Guide](#)[BD210WLP Series Datasheets](#)[BD550W Series Datasheets](#)[BD4200W Series Datasheets](#)[BD8400W Series Datasheets](#)