

**KD-M20 Series Dehydrator**

KD-M20 Automatic Dehydrator, Membrane Technologies, 0.26 SCFM, 440L/h, 0.2 to 14psi Field Adjustable Pressure

The automatic dehydrator series KD-M20 is specifically engineered to pressurize elliptical waveguides, coaxial cables, rigid transmission lines, and antenna systems reliably. By utilizing dry pressurized air in the distribution system, condensation is prevented, ensuring optimal system performance.

The KD-M20 dehydrators utilize advanced membrane technologies to ensure a continuous provision of dry air. This polymer-based membrane is selectively permeable, permitting only water molecules to pass through while obstructing larger oxygen and nitrogen molecules. This innovative membrane design allows KD-M20 dehydrators efficiently remove moisture and provide dry air without the necessity of desiccant replacement or manual reactivation. KD-M20 dehydrators are perfect for unsupervised operation with minimal maintenance needed.

**FEATURES / BENEFITS**

- High flow rate and capacity to support telecom, small to medium size broadcasting and radar applications: 0.26SCFM or 7.3L/min (+/-10% at 25°C)
- Pre-programed in the factory to minimize installation time on the site.
- High pressure, low pressure, excess run, dew point alarm, and compressor failure alarms come as standard configuration.
- 4 gas outlet ports with supplied tubing support up to 4 transmission lines, optional gas distribution manifold is available.
- Unique leakage detection function aids in inspecting the airtightness of the system.
- Pressure relief function ensures the system remain protected against potential damages caused by sudden increase in temperature or pressure.
- Supports versatile mounting including desktop, rack and wall mount.
- 110VAC, 220VAC and 48VDC power models available.
- KD-M20S/KD-M22S/KD-M24S models can be managed by network management system using SNMP and other popular protocols.

**Technical features****GENERAL SPECIFICATIONS**

| Product Model                          |            | KD-M20                                                        | KD-M20S | KD-M22             | KD-M22S                                                    | KD-M24-DC          | KD-M24S-DC |
|----------------------------------------|------------|---------------------------------------------------------------|---------|--------------------|------------------------------------------------------------|--------------------|------------|
| Dehydrator Type                        |            | Automatic Pressurization, Membrane Technologies, No Desiccant |         |                    |                                                            |                    |            |
| System Capacity                        |            | Standard                                                      |         |                    |                                                            |                    |            |
| 60 Hz Output Capacity NI/h (SCFM)      |            | 440 (0.26) +/- 10%                                            |         | 440 (0.26) +/- 10% |                                                            | 402 (0.24) +/- 10% |            |
| 50 Hz Output Capacity NI/h (SCFM)      |            | 402 (0.24) +/- 10%                                            |         | 402 (0.24) +/- 10% |                                                            |                    |            |
| Output Dew Point                       | °C (°F)    | Better than -45 (-49)                                         |         |                    |                                                            |                    |            |
| Factory Set Output Pressure (on/off)   | kPa (psig) | 20 / 34 (3 / 5)                                               |         |                    |                                                            |                    |            |
| Field Adjustable Output Pressure Range | kPa (psig) | Field configurable from 1 - 96 (0.2 - 14)                     |         |                    |                                                            |                    |            |
| Safety Relief Pressure                 | kPa (psig) | Factory set at output high pressure limit + 5 (0.7)           |         |                    |                                                            |                    |            |
| Number of Outlets                      |            | 4                                                             |         |                    |                                                            |                    |            |
| Output Fitting                         |            | Push-on quick fit for 3/8" OD tube                            |         |                    |                                                            |                    |            |
| Network Management Protocols           |            | KD-M20/M22/M24: N/A                                           |         |                    | KD-M20S/M22S/M24S: SNMP, TCP Server/Client, UDP, Multicast |                    |            |

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**ELECTRICAL SPECIFICATIONS**

| Product Model                         |      | KD-M20                                           | KD-M20S | KD-M22               | KD-M22S | KD-M24-DC      | KD-M24S-DC |
|---------------------------------------|------|--------------------------------------------------|---------|----------------------|---------|----------------|------------|
| Operating Voltage                     | V    | 110 +/- 10%, 60Hz                                |         | 220 +/- 10%, 50/60Hz |         | -48VDC +/- 10% |            |
| Max. Active Current                   | A    | 2.5                                              |         | 1.3                  |         | 5.7            |            |
| Max. Power Consumption                | Watt | 270                                              |         |                      |         |                |            |
| Electrical Feed Circuit Configuration |      | Single phase, 3-Conductor (Phase/Neutral/Ground) |         |                      |         |                |            |
| Electrical Inlet Connector            |      | IEC 320 Type C 14                                |         |                      |         |                |            |

**ENVIRONMENTAL SPECIFICATIONS**

|                                  |         |                         |
|----------------------------------|---------|-------------------------|
| Ambient Temperature Range        | °C (°F) | -25 to 65 (-13 to 149 ) |
| Ambient Humidity Range, relative | %       | 0 - 95                  |
| Noise, dBA @ 1 m, Active         | dBA     | 65                      |

**MECHANICAL SPECIFICATIONS**

|                       |         |                                              |
|-----------------------|---------|----------------------------------------------|
| Dimensions, H x W x D | mm (in) | 218 x 430 x 260 (8.6 x 16.9 x 10.2)          |
| Net Weight            | kg (lb) | 13.8 (30.4)                                  |
| Mounting              |         | Desktop, 19" Rack, ETSI Rack, and Wall Mount |

**INTERFACE**

|                        |  |                                                                                                              |
|------------------------|--|--------------------------------------------------------------------------------------------------------------|
| Front Panel Indicators |  | Alarm (red), Working (green), L D (yellow)                                                                   |
| Display                |  | 4 Segment Numeric Display to Show Pressure Values, Alarm Codes, Dehydrator State Codes and Other Information |
| Control Buttons        |  | 4, including +Add/P, -Dec/Q, Set and LeakDetection buttons                                                   |
| Alarm Terminal         |  | Alarm Summary and Power Failure, 3 Pin Dry Contact NC, COM, NO                                               |
| Keypad Tone            |  | Field adjustable to On or Off                                                                                |

**ALARMS**

|                      |         |                                                                                                      |
|----------------------|---------|------------------------------------------------------------------------------------------------------|
| Alarm Configuration  |         | Low Pressure Alarm, High Pressure Alarm, Excess Run Alarm, Dew Point Alarm, Compressor Failure Alarm |
| Alarm Contact Rating |         | Dry Contact, 30VDC 1A or 125VAC 0.5A                                                                 |
| Low Pressure Alarm   |         | Factory set at 0.1 psi lower than the low pressure limit setting                                     |
| High Pressure Alarm  |         | Factory set at 0.5 psi higher than the high pressure limit setting                                   |
| Excess Run Alarm     | minutes | 30                                                                                                   |
| Dew Point Alarm      |         | When unit output air dew point is higher than -5°C (23°F)                                            |
| Event Log            |         | Unit power-on time, Accumulated inflating time, Number of inflating, Alarm Code, Working State       |

**COMPLIANCE**

|            |  |                                                                                         |
|------------|--|-----------------------------------------------------------------------------------------|
| Compliance |  | CE, RoHS<br>LVD: EN 60204-1:2018<br>EMC: EN IEC 61000-6-2: 2019, EN IEC 61000-6-4: 2019 |
|------------|--|-----------------------------------------------------------------------------------------|

**STANDARD ACCESSORIES**

| Item       | Quantity | Description                                                               |
|------------|----------|---------------------------------------------------------------------------|
| Power Cord | 1 pc     | 6ft (1.8m) long, 110V and 220V AC models with plug, 48V DC model has lugs |



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|                   |             |                                  |
|-------------------|-------------|----------------------------------|
| Fuse              | 2 pcs       | Spare fuse                       |
| Gas Inlet Adaptor | 4 pcs       | 1/8 thread and 3/8" OD screw-on  |
| Plastic Tube      | 33 ft (10m) | Black, 3/8" OD                   |
| Mount Bracket     | 1 pair      | For rack mount and wall mount    |
| Teflon Tape       | 1 roll      | For Air-tightness in Connections |

[External Document Links](#)  
[Quick Installation Guide](#)  
[Product Manual](#)

**Notes**

1) All speciifiations at 23°C (73°F) and 50% relative humidity at mean sea level (MSL) unless otherwise noted.