DRALLIM

**PRESSURISATION &
WAVEGUIDE EQUIPMENT**

PRESSURE MONITORING

CABINET SECURITY

The Drallim Group
Leading innovators in technology and quality

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The Drallim Group
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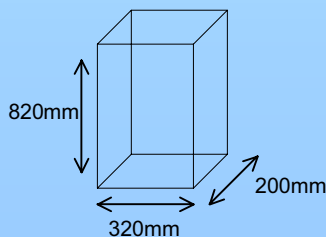
Dehydrator Equipment

Designed to meet the universal increase in demand for aerial and waveguide pressurisation, the 12434 uses tried and tested components to combine high capacity air generation with low pressure delivery. The unit is very compact and is intended to be either floor or wall mounting. Installation is intended to assist those who wish to increase space, and reduce vibration within their 19" racks.

The 12434 generates dry air using the same 1/3HP compressor as is used in the 12437, and 12377, and uses the standard twin drying bed method of dehydration. The dry air is stored within the units' integral receiver between 40 and 60 psi.   All electric and pneumatic connections are made via the top of the units 1/4" captive seal nuts and blanking caps ensure that the unit is ready for immediate attachment to up to three 1/4" aerial feeders.

As with all of the Drallim dehydrators, the 12434 comes complete with humidity detection equipment, and a valve to dump wet air to atmosphere in an alarm condition. Alarms can be monitored visually, using the units' panel mounted indicators, or remotely via the external alarm terminal. The alarm equipment monitors all aspects of potential aerial pressure failure, which include high humidity, low pressure, and mains failure.

Dry Air Delivery	Output Pressure	Dry Air Dewpoint	No. of Outlets	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)	Operating Voltage
30 ft³/hr	0.5 – 7 psi	-35ºC	3	820	320	200	30	230v AC

820mm

200mm

320mm

**12434
WALL / FLOOR
MOUNTING
DEHYDRATOR**
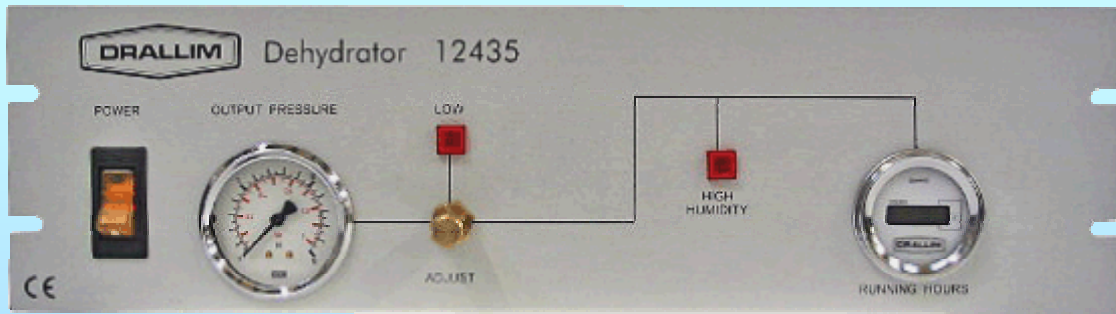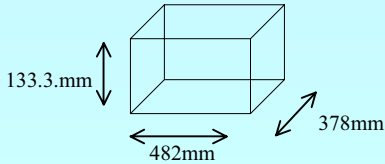
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Waveguide Pressurisation Equipment

Designed to be mounted within a 19" rack, the 12435 is one of our most compact units, occupying just 133mm in height. Using a quiet, low vibration compressor, the unit can produce 5 cubic feet per hour of dry air at output pressures of between 0.5 and 5psi.

Despite its dimensions, the 12435 houses an integral receiver, which allows the compressor to remain inactive for extended periods of time, reducing running costs. Complete with an output pressure regulator and gauge, the 12435 is delivered ready for connection to up to 3 waveguide tubes, via ¼" outlets on the rear of the unit. Standard alarm monitoring facilities include our humidity detection equipment and low pressure alarm switches. Alarm conditions are communicated both visually, and remotely via a hard-wired connection.

Dry Air Delivery	Output Pressure	Dry Air Dewpoint	No. of Outlets	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)	Operating Voltage
5 ft³/hr	0.5 – 5 psi	-35ºC	3	133.3	482	378	17	230v AC

12435
19" RACK MOUNTING DEHYDRATOR

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Waveguide Pressurisation Equipment

Dimensionally identical to the 12435, this compact 19" rack mounted unit has been designed to fulfill the requirements of slightly larger applications. A larger compressor enables the unit to produce 7 cubic feet per hour of dry air, at output pressures of between 0.5 and 5psi.

133.3.mm   482mm   378mm

Like the 12435, this unit has an integral air receiver, an output pressure regulator and gauge, and remote alarm facilities. In addition the 12436 has compressor and receiver gauges, which can help with routine maintenance, and a total flowmeter to measure the combined air loss between the units' 3 dry air outputs.

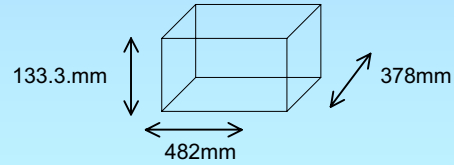| Dry Air Delivery	Output Pressure	Dry Air Dewpoint	No. of Outlets	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)	Operating Voltage
7 ft³/hr	0.5 – 5 psi	-35ºC	3	133.3	482	378	17.5	230v AC

**12436
19" RACK MOUNTING
DEHYDRATOR**

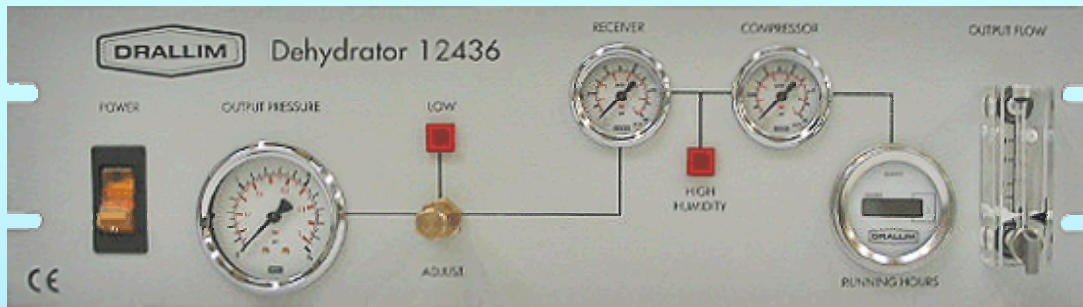*The Drallim Group*
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Waveguide Pressurisation Equipment

This unit is based directly upon the BT approved CDU3C, but has been extended to include a built in regulator and pressure gauge, eliminating the need for separate panels. It can be supplied in either a 5 outlet, or a 10 outlet variant, with each outlet using an individual flowmeter which gives the operator an instant visual indication as to air flow within a waveguide.

960mm

330mm

440m
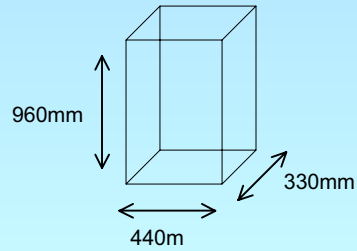
The 12437/H, designed for cable pressurisation applications, has proved successful in numerous aerial and waveguide applications, and a low pressure version has evolved. This unit is the same as its higher pressure counterpart, but for an output regulator, and gauge which are more accurate within the 0.5 to 3 p.s.i. pressure band.

The 12437/L uses an efficient 1/3 HP compressor to fill its large integral receiver to a pressure of up to 65 p.s.i. In addition to the larger receiver, the unit benefits from built in compressor and receiver gauges. These gauges can help the operator to assess the condition of a unit, and help with fault finding in the event of a failure. Another useful feature of this unit is the humidity detector test facility, which assists in fault analysis alongside the standard remote alarms.

In common with all of our current units, the 12437/L is equipped with a thermal/magnetic overload circuit breaker with neon indicator.

Dry Air Delivery	Output Pressure	Dry Air Dewpoint	No. of Outlets	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)	Operating Voltage
35 ft³/hr	0.5 – 5 psi	-35ºC	5 or10	960	440	330	60	230v AC

**12437/L
FLOOR STANDING
DEHYDRATOR**

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Cable Pressurisation Equipment

This unit is based directly upon the BT approved CDU3C, but has been extended to include a built in regulator and pressure gauge, eliminating the need for separate panels. It can be supplied in either a 5 outlet, or a 10 outlet variant, with each outlet using an individual flowmeter which gives the operator an instant visual indication as to air flow within a cable or waveguide.

960mm

330mm

440mm
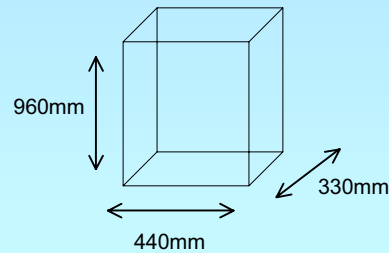
The 12437/H uses an efficient 1/3 HP compressor, to fill its integral receiver to a pressure in excess of 60 p.s.i. The receiver is a high capacity metal item, which has been tested and Lloyds certified at three times the units' maximum working pressure.

In addition to the larger receiver, which will return a shorter duty cycle on larger flow or capacity applications the unit benefits from built in compresser and receiver gauges. These gauges can help the operator to assess the condition of a unit, and help with fault finding in the event of a failure. Another useful feature of this unit is the humidity detector test facility, which assists in fault analysis alongside the standard remote alarms.

In common with all of our current units, the 12437/H is equipped with a thermal/magnetic overload circuit breaker with neon indicator.

Dry Air Delivery	Output Pressure	Dry Air Dewpoint	No. of Outlets	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)	Operating Voltage
35 ft³/hr	3 – 15 psi	-35ºC	5 or 10	960	440	330	60	230v AC

12437/H
FLOOR STANDING
DEHYDRATOR

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Waveguide Pressurisation Equipment

Closely matched with the performance and specifications of our accomplished 19" rack-mounting waveguide dehydrators, the 12445 series is intended to offer our customers a range of space-saving wall-mounting alternatives. Now available with 3 levels of performance, the 12445 range suits many applications. Protruding only 16cm or 23cm from a wall, and mounting via integral keyhole slots, these units dispense with any need for additional shelving or brackets.

Height (mm)   Depth (mm)

Width (mm)
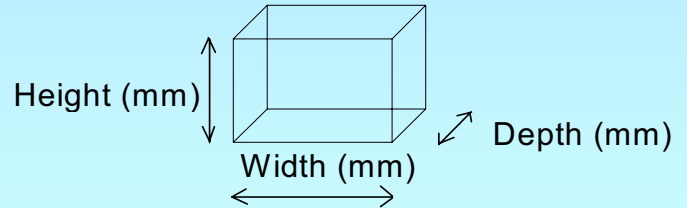
In addition to the exceptional performance now associated with Drallim dehydrators, in this case between 5 and 35 cubic feet per hour output, the 12445s are loaded with features, including the following:

- ◆ Integral air reservoir
- ◆ Adjustable output pressure regulator
- ◆ Output flow meter
- ◆ Humidity detection equipment
- ◆ Excessive run-time alarm
- ◆ Remote alarm monitoring terminal
- ◆ Digital runtime display
- ◆ High and low output pressure alarms

Unit Number	Dry Air Delivery	Output Pressure	Dry Air Dewpoint	No. of Outlets	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)	Operating Voltage
12445/S	5 ft³/hr	0.5 – 5 psi	-35ºC	3	380	500	159	17	230v AC or 115v AC
12445/M	13 ft³/hr	0.5 – 5 psi	-35ºC	3	430	530	225	24	230v AC
12445/L	35 ft³/hr	0.5 – 5 psi	-35ºC	3	430	530	225	25	230v AC

**12445
WALL MOUNTING
DEHYDRATOR**

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Waveguide Pressurisation Equipment

As the European Telecom industry increasingly standardizes upon ETSI standards, Drallim introduces a new, high-capacity dehydrator for location in both ETSI and standard 19" racks. Reversible mounting brackets allows the same unit to fit within either enclosure without any further need for mounting brackets or plates.

Whether you choose the 230vAC or the 48vDC variant, the 12446 boasts an impressive output of over 220 litres per hour at an excellent dewpoint of -40ºC. The unit comes with 2 fixed output pressure options of either 15 or 40 mbar, and 6 off ¼" pneumatic outlets as standard.

Despite its physical dimensions, the 12446 houses a high capacity, high pressure air storage vessel which allows the unit to remain inactive for long periods of time, keeping maintenance requirements to an absolute minimum.
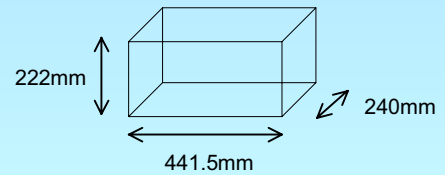
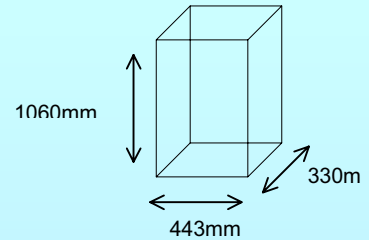| Dry Air Delivery	Output Pressure	Dry Air Dewpoint	No. of Outlets	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)	Operating Voltage
226l/hr (8ft³/hr)	15 mbar or 40mbar	-40ºC	6	222	441.5	240	14.5	230v AC & 48v DC

**12446
19" & ETSI RACK MOUNTING DEHYDRATOR**

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Waveguide Pressurisation Equipment

The basis of this unit is the BT approved CDU3C, extended to include an output regulator and pressure gauge. It can be supplied with either 5 or 10 outlets, each of which is equipped with an individual alarm flowmeter to monitor airflow. Alarm levels are easily set by manually adjusting the sensor positions on each flowmeter tube. The upper sensor is positioned to the point at which an increase in flow will activate the alarm, the lower sensor at the point when a reduction in flow will automatically reset/de-activate the alarm ready for any subsequent flow increases. This removes the need for unnecessary attendance by maintenance personnel. A panel mounted alarm lamp is provided for each individual flow tube. The high flow alarm, together with other alarms generated by the unit, is extendable. These other alarms are low and high output pressure, mains fail, and high humidity. Alarm conditions can be remotely monitored via external telemetry link.

1060mm
330m
443mm

The 12447 uses an efficient 1/3 HP compressor to fill its integral receiver ready for distribution. Another useful feature of this unit is the humidity detector test facility, which assists in fault analysis alongside the standard remote alarms.

In common with all of our current units, the 12447 is equipped with a thermal/magnetic overload circuit breaker with neon indicator.

Dry Air Delivery	Output Pressure	Dry Air Dewpoint	No. of Outlets	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)	Operating Voltage
35 ft³/hr	0.5 – 7 psi	-35ºC	5 or10	1060	443	330	56	230v AC

12447 FLOOR STANDING DEHYDRATOR

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Portable Pressurisation Equipment

For anyone intending to carry out routine maintenance to critical pressurisation units, the 12377 is an essential tool. Weighing approximately 30kg this unit is fully portable. Its design incorporates wheels, and an extendable handle to aid its movement.

600mm
325mm
330mm
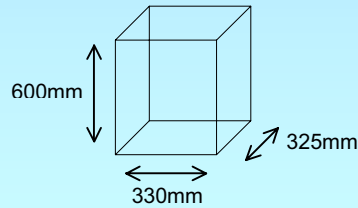
Following a recent design change to incorporate the same 1/3HP compressor that is used in the 12434, and 12437, this small unit is now able to produce a dry air output of 30 cubic feet per hour at output pressures of between 3 and 15 psi. Should increased flow be required a unique feature allows a second compressor to be connected to a built in power take off point. Each 12377 is supplied ready to run, complete with 3 metre power lead and plug, and a quick connect chuck for pneumatic connection.

Dry Air Delivery	Output Pressure	Dry Air Dewpoint	No. of Outlets	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)	Operating Voltage
30 ft³/hr	3 – 15 psi	-35ºC	1	600	330	325	30	110v AC or 230v AC

12377
SMALL PORTABLE DEHYDRATOR

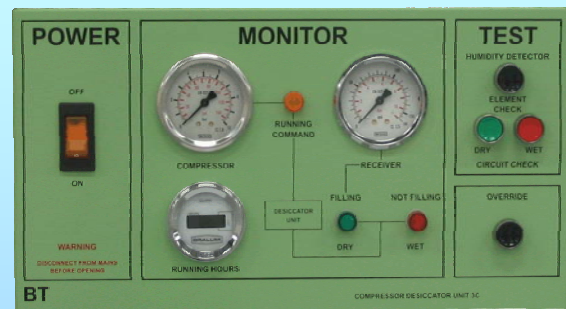*The Drallim Group*
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Cable Pressurisation Equipment

The DRALLIM Compressor Desiccator Unit 12450 (CDU 3C) is an energy saving integrated unit for supplying dry air to pressurised cables. It has been designed to alleviate the need for gas bottles in smaller exchanges, and the low dB rating allows the unit to be safely sited in manned areas. The CDU 3C consists of a small cabinet housing the compressor, desiccator, humidity detector and all electrical and pneumatic control circuits. An air receiver forms an integral part of the unit. The CDU 3C can be installed to be either wall or rack mounted using its alternative bracket positions, or can equally be sited as a floor standing unit if preferred.

800m
330
440
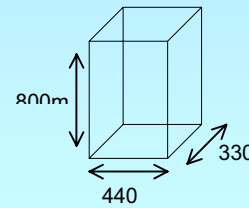
The CDU 3C has been designed for simple installation and requires little routine maintenance with most components mounted on a single door. The CDU 3C is supplied complete with a 2 metre mains lead terminated with a 3 pin 13A plug. The dry air outlet is via a quick-release coupling at the top of the cabinet. The mating connector is supplied terminating in an elbow to which ¼" OD tubing can be connected via a Panel Pressure Regulating 3A (BT Item Code 072999). The CDU 3C is Tester Humidity 1A compatible.

Dry Air Delivery	Output Pressure	Dry Air Dewpoint	No. of Outlets	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)	Operating Voltage
35 ft³/hr	N/A	-35ºC	1	800	440	330	55	230v AC

12450
(BT ITEM CODE 074375)
**COMPRESSOR DESICCATOR UNIT 3C**

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Cable Pressurisation Equipment

The new CDU 2B has been designed to replace the two largest Compressor Desiccator Units within the BT ratebook. Offering the airflow of the larger CDU 2A, but with a simplified design and assembly, the 2B combines the performance that a large cable network demands with the ease of maintenance that technicians will endorse.

Sound damped to a level of below 60dbA at 1 metre, and housed within a compact enclosure, the 2B offers unobtrusive efficiency within even the busiest telephone exchange. Integral castors, and quick connect pneumatic couplings make installation simple. Designed to be directly interchangeable with either a CDU1A or 2A, the new 2B requires an external air receiver, and pressure-regulating panel.

1190m
600mm
610m
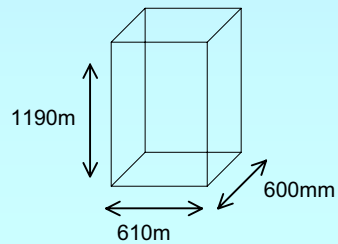
Routine maintenance will prove to be simple and convenient for anyone with experience of the previous 1A or 2A. Many of the recommended servicing spares even remain the same. For those that have no recent experience, Drallim will be happy to provide training on BT equipment, either at a UK BT site, or at our premises in East Sussex.

All units are built to our usual standard of workmanship, with pneumatic connections made using our own patented range of fittings, and wiring looms made to the standard that has gained Drallim an unsurpassed reputation for quality the world over.

Dry Air Delivery	Output Pressure	Dry Air Dewpoint	No. of Outlets	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)	Operating Voltage
170 ft³/hr	N/A	-35ºC	1	1190	610	600	123	230v AC

12440
(BT ITEM CODE 007958)
COMPRESSOR DESICCATOR UNIT 2B

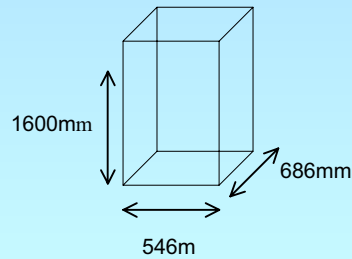**The Drallim Group**
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Cable Pressurisation Equipment

The 12255 is a unit which stands little more than 1.6m tall, and yet houses the 3/4HP compressor which provides the unit with the ability to produce over 100 cubic foot per hour of air at 9 psi.

1600mm

686mm

546m
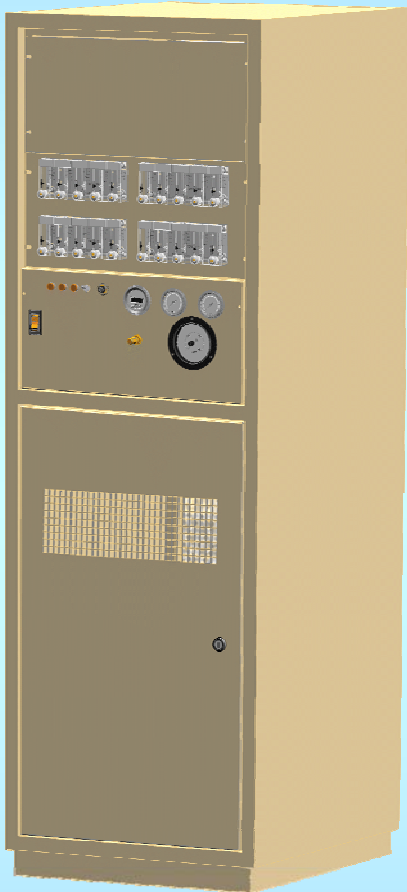
In common with all of the current Drallim pressurisation units, the 12255 will dry the output air to a minimum dewpoint of -40°C. The standard humidity detection equipment within the unit ensures that, should a problem occur, any moist air will be exhausted to atmosphere rather than being allowed to enter your cables.

Sound-proofing is a standard feature of the 12255 and helps to keep the units' noise to a maximum of 60dBA at lm. Standard features also include a gauge for the total output pressure and an individual flowmeter for each of up to 40 outputs.

Dry Air Delivery	Output Pressure	Dry Air Dewpoint	No. of Outlets	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)	Operating Voltage
100 ft³/hr	3 - 15 psi	-40ºC	Up to 20	1600	546	686	190	110v AC or 230v AC

12255
HIGH OUTPUT SINGLE COMPRESSOR DEHYDRATOR

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Cable Pressurisation Equipment

This very high performance unit stands over 2.2m high, and is home to two 3/4HP compressors. Using timers and pressure switches, the compressors are controlled to run alternately when the demand for air is within the capability of one.

2237mm

740mm

560m
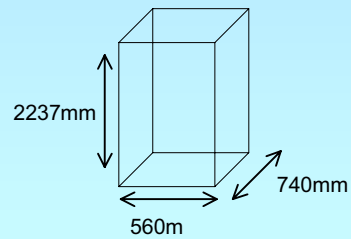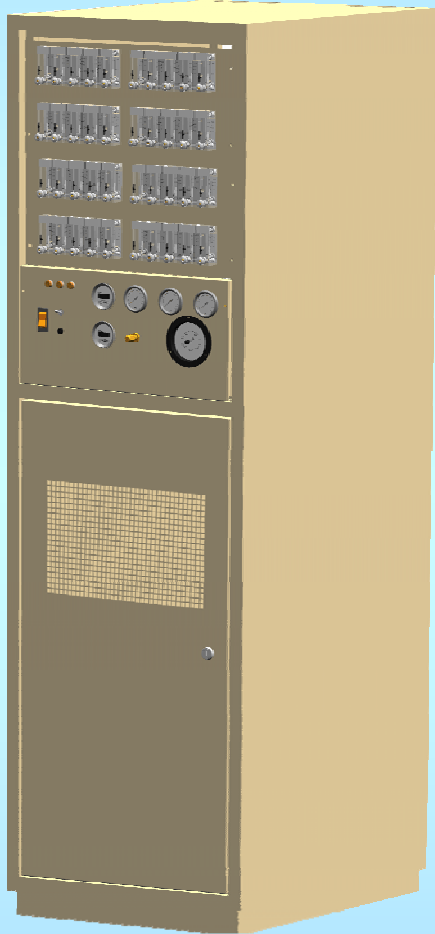
When one compressor is not enough to fill the receiver faster than the cable is drawing it off, then a switch triggers both to run simultaneously.

With both compressors running, the unit is capable of producing in excess of 185 cubic feet per hour at 9 psi. This is regulated and split between up to 80 outlets each with its own flowmeter for a visual indication of each cables demand for air.

Dry Air Delivery	Output Pressure	Dry Air Dewpoint	No. of Outlets	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)	Operating Voltage
185 ft³/hr	3 - 15 psi	-40ºC	Up to 80	2237	560	740	210	110v AC or 230v AC

**12269
LARGE TWIN-COMPRESSOR DEHYDRATOR**

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Portable Pressurisation Equipment

Introduced to meet the ever-increasing demand for precise pressure measurements, the Drallim digital manometer is designed to fulfil this need.

The manometer's prime function is to take accurate pressure readings of air filled telephone cables, but can also be used on other applications using non-corrosive gases. Based on a piezo-resistive sensor complete with its own laser trimmed temperature compensation, this manometer brings the user new excellence in pressure monitoring. With only two controls on the front escutcheon, the operation of the manometer is simple, quick and requires no setting time.

Operating Range	0-1 bar or 0-15 psi or 0-100kPa
Maximum Pressure	2 bar or 30 psi
Accuracy	±3 mbar
Resolution	1mbar or.01psi
Response Time	Typically 1 second
Stability Time	Typically 1 second
Zero Drift	Less that 1 mbar/15 mins.
Thermal Stability	Fully temperature compensated circuitry
Operating Temperature	-5ºC - +50ºC
Storage Temperature	-20ºC - +80ºC
Display	3½ digit LCD 12.5mm characters. High temperature specification. Low battery indicator
Housing	Black ABS Thermo Plastic with textured finish: Nylon reinforced PVC pouch with zip fastener for tube and connector
Batteries	2X9v PP3 type
Battery Life	Better than 100 hours intermittent use
Overall Dimensions	W140 x H60 x L210mm including pouch
Overall Weight	650 g
Display Options	1 Push for on, push again for off 2 Push and hold – release for off 3 Push for on – automatic time off. Factory set to customer specification (30 seconds – 5 minutes)

The manometer readout is available in mbars, psi and kPa and can be supplied in a series of operating ranges. Designed with outdoor application in mind this versatile instrument is located in a tough custom made ABS Housing.

The manometer comes complete with a neckstrap and pouch that houses a quick connect chuck and 1½ meters of PVC connecting tube.

**13828
HAND-HELD DIGITAL MANOMETER**

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Flowmeter Panel *AM100fb*

A flowmeter will provide an instant visual indication of a leak on an individual telephone cable or waveguide. It will measure the flow rate of the leak, allowing the user to gauge the severity of the problem.

Our panel comes complete with up to 20 individually switched flowmeters, and yet occupies only 3 or 5U of valuable 19" rack space, depending on configuration. It is very simple to install and connect.
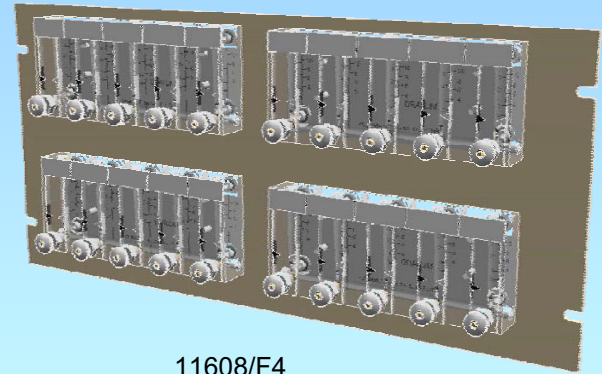
11608/F4
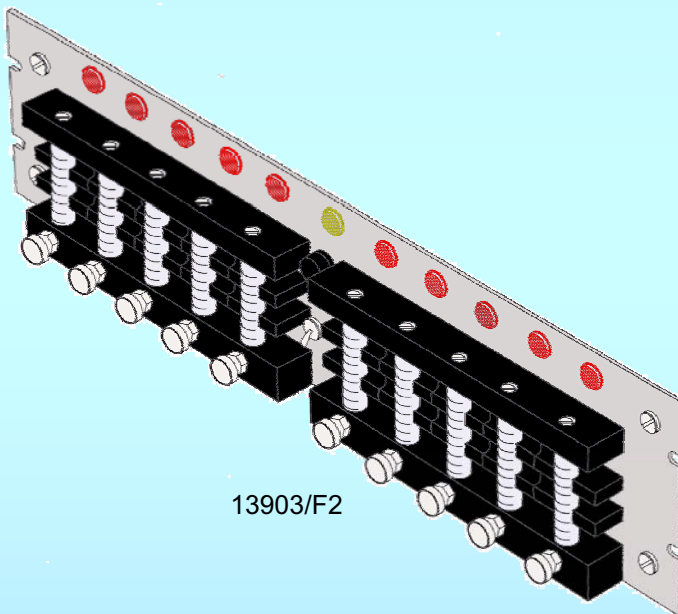
13903/F2

Alarm Flowmeter Panel

When you need to monitor your assets individually from a remote location our Alarm Flowmeter panel might provide the solution.

Occupying 3U of rack space, and powered by an external 12vDC supply, the panel will monitor the flow rate of either 5 or 10 individually switched outputs, providing a self-resetting remote alarm in the event of high or low flow.

Type	Outlets	Height (mm)	Width (")	Voltage
Conventional				
11616/F1	5	3U	19"	N/A
11616/F2	10	3U	19"	N/A
11608/F1	5	5U	19"	N/A
11608/F2	10	5U	19"	N/A
11608/F3	15	5U	19"	N/A
11608/F4	20	5U	19"	N/A
Alarm				
13903/F1	5	3U	19"	12v DC
13903/F2	10	3U	19"	12v DC

ANALOGUE FLOWMETER PANELS CONVENTIONAL & ALARM TYPE *AM100fb*

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AIRMON PRESSURISED TELECOMMUNICATION CABLE MONITORING

Principle

Dry air compressed into a copper cable will protect the copper from the potential ingress of moisture, improving reliability and clarity, and reducing long-term costs. This is especially important where widespread adoption of broadband services requires optimum cable performance. This pressure can provide an additional facility of allowing maintenance engineers to predict and locate potential faults by identifying holes in the cable sheathing. AIRMON exists to comprehensively provide you with these facilities.

System Features

Alarms

The foremost feature of the system is its ability to produce alarms when air pressure falls below a selected threshold. Many different thresholds can be set:

- High-pressure alarms
- Low-pressure alarms
- Trend-alarms

These alarms are divided into groups by type and area, and can be routed to different alarm terminal PCs instantly or as a daily or weekly report. You can choose which engineers need what information, and which repair work you consider essential. Additionally the system can be integrated with alarms from your compressor/ dehydrator units, to provide warning of:

- Mains-Fail
- High-humidity
- High-pressure
- Low-pressure

It is possible to prioritise work by graphing the condition of a cable over a period of time, which can be months or hours. This can show that a cable has deteriorated gradually over a period of months and, whilst it has reached your threshold for repair, it is likely to remain free from water for the next few days. More of a priority would be the cable that has read a constant pressure for months, and then fell instantly to zero at a particular time, on a particular day. Further investigation using the AIRMON system might reveal the exact location of a local contractor who has just cut through one of your critical cables.

**AIRMON
REMOTE MONITORING**

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Analysis

One of the most valuable features of the system is its ability to plot pressure against distance graphs. An automatic computerised version of the more antiquated 'pressure runs'; the system constantly reads the pressure at intervals along your cables. At your request a graph is produced which will illustrate these multiple readings, and 'interpolation' lines will help you to pinpoint the cable damage.

Diagnostics

The system has many self-diagnostic facilities, and will generate alarms when transducers become disconnected. Transducers are addressable and can therefore be connected in series along a single pair of wires, making installation simple and using little of your cable resources. AIRMON can provide reliable transmission over distances of up to 100km (60 miles.)
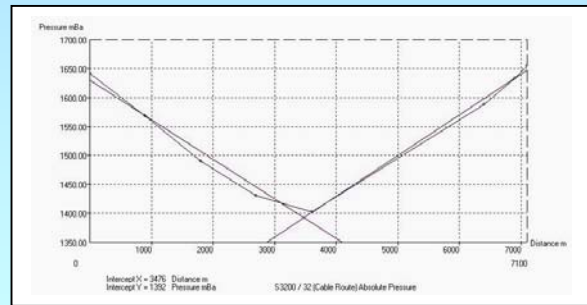
System Components

Transducers

These are small and reliable, and allow a sensor to transmit analogue readings using a digital protocol. They are individually assigned with one of 100 different address settings. This "address" is set using a local hand held device without the need for DIL switches. Transducers are available in pressure, temperature, and humidity variants, and are available for mounting within cabinets, exchanges, and on or in cable joints.
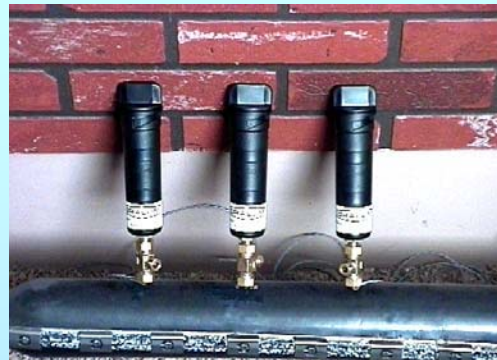
**AIRMON
REMOTE MONITORING**

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Leading innovators in technology and quality

AIRMON

AM100c – Data Collect Equipment Kit 2D (DCE)

The control units communicate with the main server via modems or a fixed link. They are powered by the exchange battery, providing uninterrupted service. Constantly at work, the unit will 'poll' its transducers repeatedly, logging each reading, and monitoring for significant pressure drops. Control units will instigate communications with the server if in an alarm condition, but will otherwise remain 'off line'. Available in 8, 16 or 24 port configurations.

AM100m - AIRMON Data Collect Equipment Multiplexer

The multiplexer unit allow expansion of the number of monitored channels when linked to a Data Collect Kit 2D (DCE), allowing multiples of 32 additional channels.

AM100cm - Remote Contact Monitor

A remote contact monitor is a transducer, which instead of reading pressure, temperature, or humidity, will read switch positions. The AIRMON software can differentiate between these switches, and create an alarm when a change in state is detected. A useful application of this is the remote monitoring of the various alarm states available from your compressor dehydrator units.
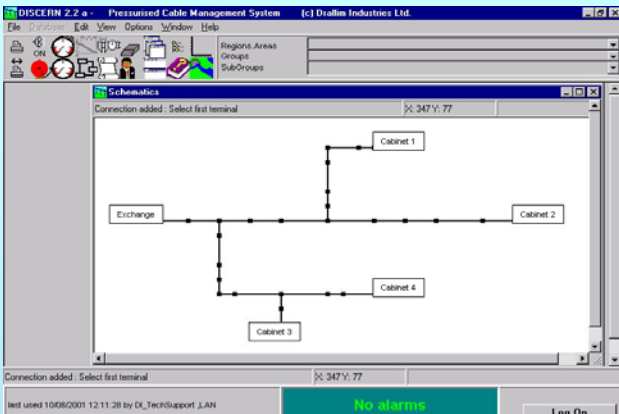
Software (Drallim)

The database is contained on a server, with 'client' terminals dialling in to read information, and being contacted via modem to receive alarms. Access can be restricted to 'read-only'. Viewers can use the systems graphing facilities to find faults, and determine leak rates. They can create cable diagrams, linked to live pressure readings.

Compatibility

The AIRMON range of control units will handle both old and new transducer types normally addressed on separate input lines.

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Key:
- Pressurised cable
- Air Lines
- Communnication pairs
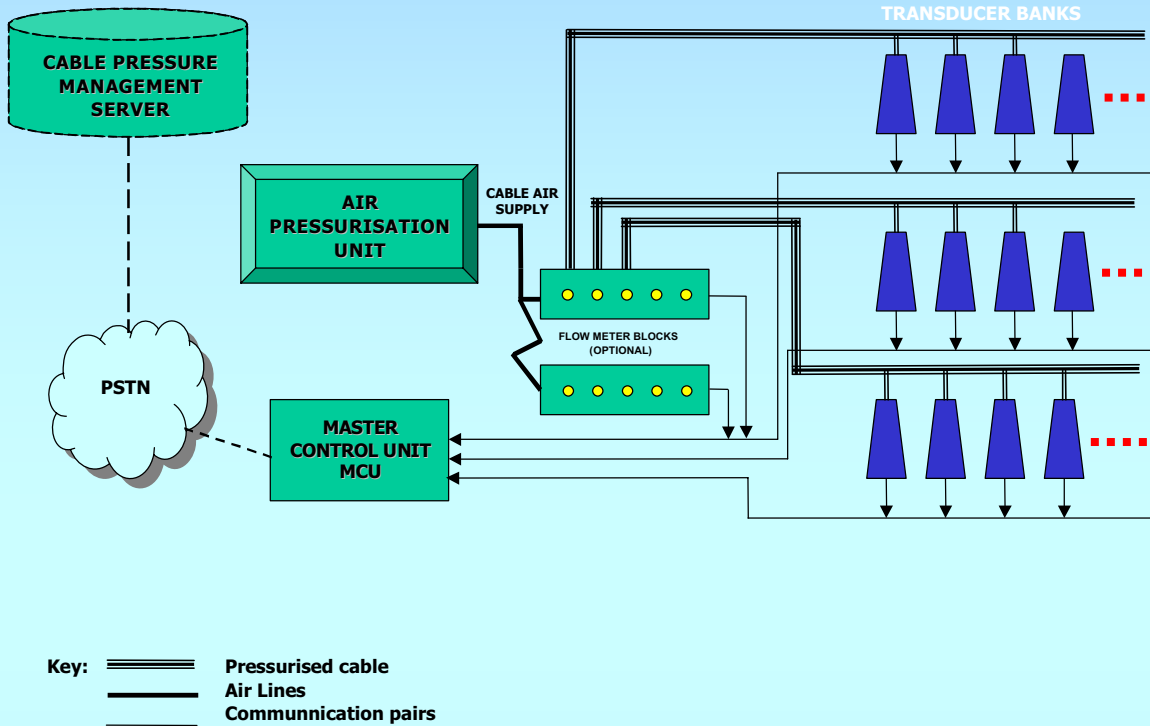
AM100fb - Flowmeter blocks

These flowmeter blocks provide a useful visual indicator of flow rates and are normally mounted in the exchange racking adjacent to the compressor/ dehydrator units. They are supplied in a standard multiple of 5 indicators.

AM100f – Addressable Flow Block 2

As a useful automation feature, electronic flow transducers can be added to the flowmeter blocks. These are also provided in banks of 5, and are mounted directly onto the flowmeter blocks. For these to be monitored, a custom software adaption to either Drallim Discern or other user software (CPMS etc….) is required.

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Data Collect Equipment Kit 2D *AM100c*

The AIRMON system Data Collect Equipment Kit 2D is an intelligent controller with efficiently integrated transducer interface, line multiplexer and control port interface.

The Data Collect Equipment Kit 2D - AM100c can be deployed across nationwide networks of telecommunications cables to carefully monitor pressurisation and airflow performance.

Control is achieved through a serial interface that can be configured for local or remote access. An integral PSTN modem is included. Adaptors are also available for Local Area Network connectivity and control.

The modular design of AM100c is available with 8, 16 or 24 ports (standard configuration), each can poll up to 100 pressure, temperature or flow transducers. These ports are presented on Krone^{TM} terminal blocks. Additional expansion ports can be provisioned to allow for unlimited sensor applications.

The AM100c is an Industrial grade design, for long life and high reliability, and can be shelf (standard configuration) or rack mounted, using the appropriate installation kits.

The unit is powered from a nominal 48VDC positive earth supply, max current 200mA.

Key features:

- Fully integrated modular design

- Local or remote communication options, including Integral PSTN modem

- 2 line pair capacity, expandable to 8 line pair using AM100a, 3 port expansion cards

- Up to 100 transducers deployed per port, typically over a 10km line length

- 16 port Contact monitor included (requires CMPS software upgrade or external contact monitor option)

- Shelf or 19" rack mount installation kits

- Compatible with 20 years of Drallim pressurisation equipment and transducer development.
  Accepts TUA2, TUA4 and AM100p/BT ("303" protocol) series transducers.

Ordering information:

|	
AM100c - 8 port	3991503/8/K
19" Rack mounting kit	3991503/RMK
Shelf Mounting Kit	3991503/SMK
Control port serial cable	3991503/CPC

Approvals: CE marked, EMC to EN61000, Environmental IEC 68 (ETS300 019)

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Airmon system *AM100p*
Pressure transducer

The AM100p is used to monitor the air supply pressure in telecommunications cables. This low power, non intrusive compact unit can be connected in multi-drop systems of up to 100 Airmon devices. This transducer is connected via a nylon tube embedded in the cable joint where air line connections cannot be provided.

The core controller and analogue circuitry use the latest highly integrated components to provide a very low cost, low power, highly reliable and accurate instrument. The product is manufactured using industrial rated components.
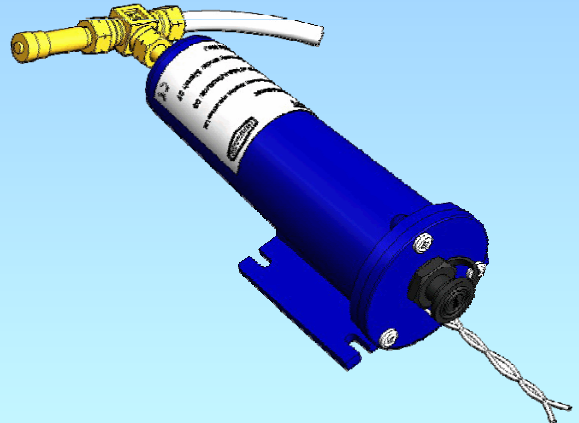
Several pressure ranges and accuracy grades are available; the standard product provides better than 2% fsd accuracy at pressures of up to 2 bar, compensated over a wide temperature range. The high level of measurement repeatability provided is the most significant factor required to maintain a pressurised cable system and guarantee consistency of performance trends.

Key features:

- Compact and rugged ABS housing, for reliable installation into the telecommunications infrastructure maintaining cable integrity.

- Flexible mounting arrangement using bolts or strapping.

- 2% Standard or 1% (Optional) fsd accuracy available over –15 to +55° C operating range.

- Up to 100 devices per communications pair.

- Standard fitting kits available, including Schrader valve option.

- Repeatability to 0.1% for long term measurement consistency.

- Addressable externally using AM100id Address Setter (See page 22 of this Brochure).

- Schrader air valve and connectors to suit ¼" nylon tube.

- Drallim GSM Wireless Access controller compatible (Optional).

- Easy to maintain over the system lifetime, being external to the cable joint.

- Very low power operation, maximum 120uA quiescent, 1.5mA active.

Ordering information:

AM100p	(3991500)	- 2 bar standard 2% accuracy, temperature compensated
ID POD	(3991508)	- Transducer management tool + 100pl
Mounting plate	(3991504/8)	- 700x120 plate accepting up to 8 transducers

Note: AM100b variants available, compatible with older TCU control unit protocol

Approvals: CE marked, EMC to EN61000, Environmental IEC 68 (ETS300 019*)*

**AIRMON
ADDRESSABLE
PRESSURE
TRANSDUCER 2D
*AM100p***

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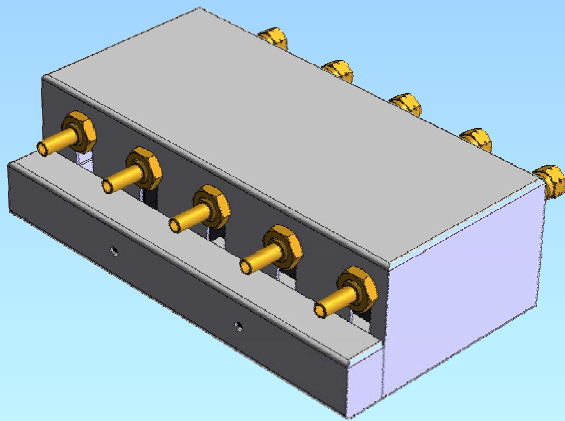
AIRMON System *AM100f* Addressable Flow Block 2 (5 way)

The AM100f is used to monitor the air supply flow into the telecommunications cables. The unit is fitted in line with up to five cable air supplies. Standard flow rates of up to 5 l/m and high measurement accuracy guarantee optimum cable performance and prompt indication of supply or cable leak problems.

Features:

- 1.5% flow accuracy measurements at rates below 1l/m

- Addressable and can be integrated into a network with up to 99 other AIRMON system transducers

- Rugged construction, for reliable operation/ Integration into the telecommunications infrastructure

- Very low power operation, maximum 5mA

- Drallim analogue flow meter block compatible

- Control, data logging, alarm processing using AIRMON AM100c controller.

- User visible indication of alarm condition and power supply status

- Wide input range, nominal 48VDC, power supply input

Ordering information:

AM100f - Addressable Flow Block 2 (5 way)   -   3991501
AM100fb - Analogue Flowmeter   -   See page 17 of this brochure or
                                                                                        data sheet AM100fb

AM100id - Pressure Address Setter   -   ITEMCODE041985
                    (Handheld Addressing Device)

Approvals: CE marked, EMC to EN61000, RoHS compliant Environmental IEC 68 (ETS300 019*)*

AIRMON ADDRESSABLE FLOW BLOCK 2 (5 WAY) *AM100f*

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AIRMON system *AM100id*
Pressure Address Setter
(Handheld Addressing Device)

The transducer management tool is used to configure AIRMON system transducers.

This unit is a compact battery powered device for use in the field. The AM100id offers a simple menu driven system for transducer configuration.

The AM100id records controller port information and associated transducers to avoid address duplication and aid transducer asset management.

Key Features:

- Compact and rugged enclosure

- Two pin IP68 rated connection system.

- No awkward DIL switches to set.

- Transducer address management system

- Integrated TUA tester (Local pressure measurement)

- Operating temperature range 0 to +50°C –

- Battery operated

Ordering information:

AM100id – Transducer management tool. 3991508 – Standard to suit AM100(p or f) Transducers (IP68 – Small connector)

Approvals: CE marked, EMC to EN61000, Environmental IEC 68 (ETS300 019*)*

**AIRMON
PRESSURE ADDRESS
SETTER *AM100id***

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Network Security

Security

To any large telecom company their cable network is arguably their most valuable asset. With increasing use of contractors' labour, and the future commitments of "local-loop unbundling" these assets are becoming increasingly vulnerable.

Cabinets are the gateway to your network. Is it still acceptable for this gateway to be guarded by a mass-produced key and goodwill?

Cabalarm gives the network manager the ability to constantly monitor the access to the cabinets and react to illegal openings. Today, with the emphasis on information technology, it is not only necessary to advocate security to the telecommunications customer but to be able to demonstrate it. Whether the customer is interested in ensuring the security of sensitive data traffic or merely knowing that no one can use his number to make outgoing calls, Cabalarm will provide the necessary peace of mind.
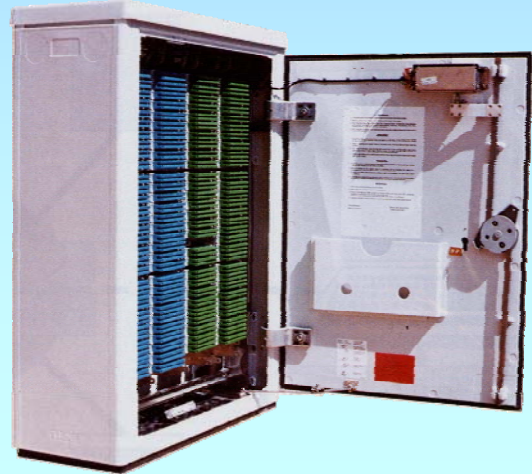
Alarms

It is fair to say that any simple proximity switch would alert you to a cabinet's opening. It will not, however, sort through these openings and alert you only to unauthorised cabinet entries. Cabalarm is an intelligent system which will allow access to all or selected cabinets in your network, to people whom you select.

Access Control

Cabalarm allows you to choose who has access to which cabinets, and when. The system allows you to revoke an engineer's security clearance in seconds.

Contractors

8 different security levels enable you to restrict contractors' access to specific cabinets. This clearance can then be cancelled at the end of the contract. Their name and details can be kept on the system, and records of each of their accesses are kept.

Local-Loop Unbundling

While it may be inevitable that competitors will soon be allowed access to your cable network, it must surely remain the right of any network owner to control and monitor access to it.

'CABALARM'
CABINET SECURITY

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Remote Access

Cabalarm allows the system administrator to open cabinets from his PC. This is a useful function if, for any reason, you wished to temporarily increase security. Security clearances can be postponed, and access only allowed on an individually authorised basis.

History Reports

In addition to access control and alarm monitoring, the Cabalarm system can provide some very useful management information. The systems ''access history'' database contains details of every single cabinet opening in the lifetime of the system.

The history screens will illustrate the time the cabinet was opened, the name of the engineer, the number or name of the cabinet, and the time the cabinet was locked. You can choose to view accesses to a specific cabinet, or by a specific technician, or at a specific time.

This information will assist you to identify whether particular technicians may require further training to improve the time in which they are clearing faults. It will help you to identify whether specific cabinets are causing excessive faults, and are therefore a drain on your resources.

Methods of Entry

Although a system administrator may access cabinets remotely, from either his office or the telephone exchange, a cabinet will usually be opened by a technician, at the cabinet.

The system will generate a personal identification number for each technician. This number is entered into a normal technician's phone butt, connected across 2 metal studs on the exterior of the cabinet. Upon receiving an authorised 6-digit number, the cabinet will unlock.

Cabalarm will automatically re-lock the cabinet once the door has been securely closed, and will resume monitoring for illegal entry.

Equipment

The interface between telecom technicians and Cabalarm is a secure electronic stainless-steel lock. As this lock can be fitted to your existing cabinets, there is no need for costly and time-consuming cabinet replacement.

The entire Cabalarm system can be installed using only very basic tools. Drallim will provide a drilling jig to align some small holes correctly in your cabinets. The fitting kit supplied with each lock will have been tailored to fit your exact cabinet types. For your technicians to access locked cabinets they will require only a standard cabinet key, a standard phone butt, and a very brief explanation.

Waveguide pressurisation product selection guide

	12434	12435	12436	12437/L	12445	12446	12447
Dry Air delivery	30 ft/hr	5 ft/hr	7 ft/hr	35 ft/hr	5 ft/hr	6 ft/hr	35 ft/hr
	850 l/hr	140l/hr	200 l/hr	1000 l/hr	140l/hr	170l/hr	1000 l/hr
Output Pressure	0.5-5 psi	0.5-5 psi	0.5-5 psi	0.5-5 psi	0.5-5 psi	0.2 or 0.6 psi	0.5-7 psi
	35-345 mbar	35-345 mbar	35-345 mbar	35-345 mbar	35-345 mbar	15 or 40 mbar	35-485 mbar
Outlet Dewpoint	-35ºC	-35ºC	-35ºC	-35ºC	-35ºC	-45ºC	-35ºC
No. of Outlets	3	3	3	5 or 10	3	6	5 or 10
Air Receiver	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sound Damping	No	No	No	Yes	No	No	Yes
Height (mm)	820	133.3	133.3	960	380	220.5	1060
Width (mm)	320	482	482	440	500	441.5	443
Depth (mm)	200	378	378	330	159	240	330
Weight (kg)	30	17	17.5	60	20	20	56
Voltage	230v	230v	230v	230v	230v or 115v	230v or 48v	230v
Mounting Method	Wall/ Floor	Rack	Rack	Floor	Wall	Rack	Floor

Cable Pressurisation Product Selection Guide

	12377	12405	12434	12255	12269	12437/H	12440	12450
Dry Air delivery	30 ft/hr	625 ft/hr	30 ft/hr	100 ft/hr	185 ft/hr	35 ft/hr	170 ft/hr	35 ft/hr
	850 l/hr	17500 l/hr	850 l/hr	2800 l/hr	5200 l/hr	1000 l/hr	4800l/hr	1000 l/hr
Output Pressure	3-15 psi	3-15 psi	0.5-5 psi	3-15 psi	3-15 psi	3-15 psi	N/A	N/A
	200-1000 mbar	200-1000 mbar	35-345 mbar	200-1000 mbar	200-1000 mbar	35-1000 mbar	N/A	N/A
Outlet Dewpoint	-35ºC	-40ºC	-35ºC	-40ºC	-40ºC	-35ºC	-35°C	-35ºC
No. of Outlets	1	Up to 140	3	Up to 40	Up to 80	5 or 10	1	1
Air Receiver	No	Yes	Yes	Yes	Yes	Yes	No	Yes
Sound Damping	No	Yes	No	Yes	Yes	Yes	Yes	Yes
Height (mm)	600	2110	820	1600	2237	960	1190	800
Width (mm)	330	1350	320	546	560	440	610	440
Depth (mm)	325	740	200	686	740	330	600	330
Weight (kg)	30	421	30	190	210	60	123	55
Voltage	230v or 115v	380v 3-phase	230v	230v or 115v	230v or 115v	230v	230v	230v
Mounting Method	Floor	Floor	Wall/Floor	Floor	Floor	Floor	Floor	Rack/Floor

Drallim Industries Ltd operates a policy of continual improvement. While every effort has been made to ensure that details are correct at the time of printing, Drallim reserves the right to change any specifications without notice.

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