ADM

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ADM FIRE & SECURITY SOLUTIONS

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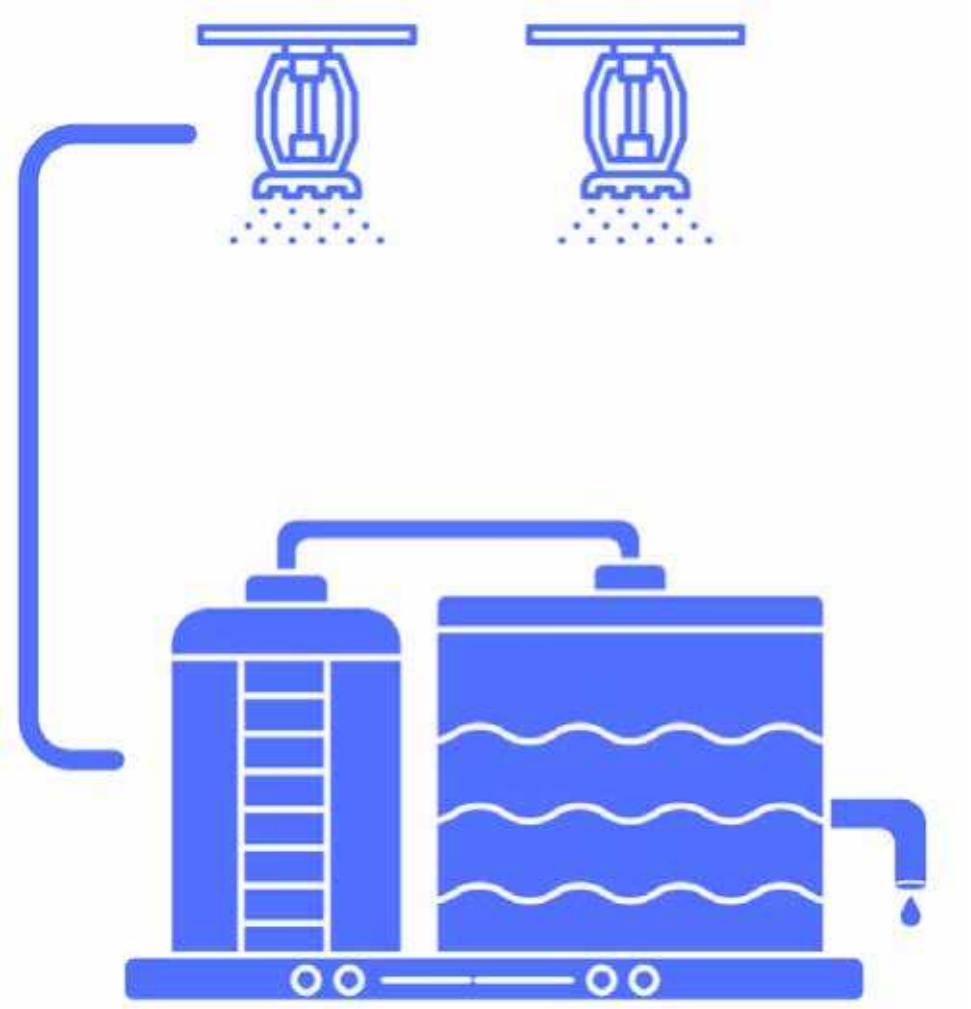
Contents

PRODUCT OVERVIEW



Pressure switches and transmitters
Flow meters

- **DIN Rail Power Supplies**
- **DIN Rail DC UPS**
- **Power Supplies with Battery Charging UPS**
- **Function**
- **Process controllers, indicators, and data recorders.**

POWER PRODUCT RANGE

MEAN WELL
SRD/TDR Series DIN Rail Power Supplies

- 12V, 24V, 48V.
- 75W, 120W, 240W, 480W, 960W.
- Up to 8 480W can be connected in parallel (SDR-480P).
- Up to 4 960W can be connected in parallel.
- High efficiency (SDR/TDR-960).
- Single phase (SDR) / Three phase (TDR)
- Constant current limiting overload protection.
- 130% ~ 150% peak load capacity.
- 3-year warranty.

MEAN WELL
HRP Series High Reliability Power Supplies

- Power outputs ranging from 75W to 600W.
- Voltages from 3.3V to 48V.
- Power factor correction.
- Models with power output of 600W can be connected in parallel*.
- Constant current limiting.
- Withstands 300 VAC surge for 5 seconds.
- 5V / 0.3A standby output.
- High efficiency.
- 5-year warranty.

*refer to data sheet

MEAN WELL
LAD Series Enclosed DC UPS

- Power outputs: 120W, 240W, 360W, 600W
- Single output with battery charging function.
- Models for 12V and 24V batteries.
- TTL signals for status detection.
- Adjustable primary output.
- 1U low profile.
- Wide operating temperature range.
- 3-year warranty.

ADELSystem
CBI Series DIN Rail DC UPS

- DC UPS: 12V, 24V, 48V
- 3A, 5A, 6A, 10A, 15A, 20A models available
- Temperature compensation*
- For lead-acid and Lithium-ion batteries
- Optional remote display controller (15A & 20A)
- 4 charging phases:
  - Recovery of flat batteries
  - Bulk charge with constant current
  - Absorption at constant voltage (Boost if Fast Charger enabled)
  - Float for maintenance.

*requires addition probe

MEAN WELL PRODUCTS FOR THE FIRE & SECURITY INDUSTRY

MEAN WELL has been designing and manufacturing off-the-shelf switch mode power supplies for more than 40 years. In that time MEAN WELL has grown to be a globally recognised brand renowned for producing high quality power supplies at an affordable price. MEAN WELL's broad product range means that they can offer a power supply solution suitable for many different fire and safety applications applications.

DIN Rail Power Supplies

DIN rail power supplies are widely used in the fire and security industry to provide reliable, regulated DC power for sensitive electronic equipment such as PLCs, data recorders, and other control equipment.

The SDR series is commonly used, as it offers high efficiency and can tolerate a peak load capacity of 130% to 150% of its rated power output. They are available with 12V, 24V, or 48V DC output with power ratings ranging from 75W to 960W. Larger models can also be connected in parallel to supply additional power.

High Power Requirements

Fire suppression systems may involve pumping water at high pressure. This requires a significant amount of power. For these applications there is the MEAN WELL RST series 3-phase power supplies. These are available in 5000W and 10000W models and have an output voltage of 24V, 36V, or 48V DC.

They have built-in power factor correction and up to 4-units can be connected in parallel, depending on the model selected.

High Reliability Power Supplies

By their nature, fire suppression applications necessitate components that are highly reliable. In these situations, it is recommended that a MEAN WELL HRP series high reliability power supply is used. These are manufactured with high quality electronic components and are rigorously tested at MEAN WELL's factory.

These power supplies come with a 5-year warranty.

Power Supplies with UPS Battery Charging Control

The MEAN WELL LAD series power supplies offer power outputs ranging from 120W to 600W and operate at voltages compatible with both 12V, 24V, 36V & 48V batteries. These units feature a single output with battery charging function, making them ideal for applications such as security control, fire protection, and emergency lighting. Additionally, they provide TTL signals for status detection, have an adjustable primary output, and are designed with a 1U low profile. Their wide operating temperature range (-20°C to +60°C) ensures versatility, and they come with a 3-year warranty for added peace of mind.

MEAN WELL
VARIABLE FREQUENCY DRIVES

Global efforts to combat climate change have made net-zero emissions and energy-saving indicators critical for electricity usage. Motor-related equipment accounts for 46% of global electricity and energy usage, surpassing lighting at 19%. Brushless DC Motors (BLDC) offer advantages like high efficiency, small size, and quiet operation. MEAN WELL's new VFD series, designed after extensive research, includes eight models with built-in power factor correction, covering both DC and AC input voltages. These fanless units achieve up to 93% efficiency and comply with safety standards.

These controllers are suitable for use in applications such as smoke extraction equipment and water pumps.

Speak with the ADM Team Today to learn more about Variable Frequency Drives!

MEAN WELL

1300 236 467 / sales@admtech.com.au

meanwellaustralia.com.au

DC UPS SOLUTIONS FOR THE FIRE & SECURITY INDUSTRY

ADELSystem is a European manufacturer of DIN rail mounted DC UPS systems. The units combine a high-quality switch mode power supply, battery charger, and back-up unit in one compact DIN rail mountable housing that is easy to install. They are ideal for backing up power for critical infrastructure, safety systems, and environmental control monitors.

All units incorporate 4 charging phases to manage the recovery of flat batteries, bulk charge with constant current, float maintenance, absorption at a constant (boost if fast charging is enabled). An optional remote controller / display unit is available for some models which allows for off-site and monitoring and control of the UPS system. Temperature compensated charging is also available, which requires an optional temperature probe.

WATER INGRESS RESISTANT CONNECTORS AND CABLES

ADM is an authorised Harting distributor in Australia.

Harting's Han-INOX® connector series features durable stainless-steel housings and offers bulkhead mounted housings and hoods with top, or side cable entry and protection covers. These connectors have been designed to withstand harsh conditions.

The Han-INOX® family includes stainless steel hoods and housings, fully compatible with the Han® and Han-Modular® series inserts, offering a high degree of flexibility for various applications. The connectors are ideal for situations where a robust solution suitable for more demanding environments is required.

Enclosures / Distribution Boxes

ADM stocks a range of IP66 rated weatherproof powder coded steel enclosures. The sizes we carry as standard are:

Model Number	Height	Width	Depth
FT202015	200mm	200mm	150mm
FT303015	300mm	300mm	150mm
FT403015	400mm	300mm	150mm
FT806020	800mm	600mm	200mm
FT504020	500mm	400mm	200mm
FT604020	600mm	400mm	200mm
FT1006025	1000mm	600mm	250mm

We also offer a range of tough polycarbonate plastic IP66 rated enclosures. These have a flame-retardant rating of UL 94 5VA and a UV resistance rating of UL 746C. This makes them perfect for use where highly corrosive chemicals may be present and in outdoor environments.

INDUSTRIAL MEASUREMENT SOLUTION
FOR THE FIRE & SECURITY INDUSTRY

Pressure Switches and Transmitters

Pressure transmitters and/or pressure switches are often fitted to the supply line to fire hoses and fire suppression networks around a building. These pipelines are required to remain under constant pressure, ready to deliver water as loss in pressure is often indicative that the water supply may be compromised. The signal whether it be an on/off switch or an analogue signal, is typically fed back to a BMS (building management system) that will raise the alarm of the fault condition so that it can be rectified.

Hydrostatic Level Sensors

Hydrostatic sensors are well suited to monitoring the level of fluids and liquids in tanks, lakes, rivers, and water bores. They do this by determining the pressure at a specific depth. The sensor is immersed in the water and is resilient to some of the environmental influences that can impact the performance of other types of level sensors.

Ultrasonic Level Transmitters

ADM is proud to offer the Pulsar Measurement range of ultrasonic sensors. Many models are IP68 rated with a rugged design making them suitable for use in a range of harsh environments. Ultrasonic sensors can measure both conductive and non-conductive liquids, providing versatility.

Eurotherm Process Controllers, Displays, & Data Recorders

ADM is the Australian distributor of Eurotherm process controllers, indicators, and secure data recorders. They are typically used in Fire Safety applications to actively monitor water levels in holding tanks.

Radar Level Sensors

The Pulsar Measurement REFLECT radar sensors also measure level of fluids (or solids), but use a different technology that allows for:

- Better performance on foaming surfaces.
- Resilient signal on turbulent surfaces.
- Resilient to vapor, condensation and/or dust.
- More compact sensor design.
- Narrow beam angle for smaller diameter tanks.
- Obstacle avoidance.

Vaisala Indigo200 and Probes

Vaisala Indigo200 Transmitter is a host device for displaying measurement values from Vaisala Indigo-compatible probes and/or transmitting them to automation systems through analogue signals. It has Modbus RTU communications which is great for running a single multidrop cable about the building collecting the signal of all the devices.

Probes available:

- HMP series humidity and temperature probes.
- TMP1 temperature probe.
- DMP series dew point probes.
- GMP250 series carbon dioxide probes.
- HPP270 series vaporized hydrogen peroxide probes.
- MMP8 moisture in oil probe.

Handheld Force Gauges

Used to test the force required to open an emergency door.

TESTING THE FORCE REQUIRED
TO OPEN AN EMERGENCY DOOR

In Australia, regulations exist which stipulate the maximum force required to open a door. This is particularly important for improving accessibility for wheelchair users, older persons, and anyone with an injury.

When the standard was drafted in 2009 it stated the maximum forces required to open as below:

For doors other than fire doors and smoke doors where a door closer is fitted, the force required to operate the door shall not exceed the following:

1. To initially open the door - 20 N.
2. To swing the door - 20 N.
3. To hold the door open between 60° and 90° - 20 N.

The Lutron FG-5020 force gauge is used in Australia to test the force required to open a door.

The FG-5020 has a measuring rage of up 196.10 N, which is ideal for this application, as ideally you wouldn't want the door to require the maximum force to open it.

It also has a 15 N overload capacity, so it will give readings to show if a door requires more force than permissible to open it.

The peak hold function freezes the highest reading on the display until you are ready to move on.

The LCD display also has a 'reverse' view function, so it can be easily read regardless of which way round the device is being held or used.

Data logging software and a USB cable are available as optional extras, to give you this additional functionality if required.

Lutron Electronic Enterprise Co., Ltd. was established in 1976 and has been manufacturing Test & Measurement Instruments for more than 40 years and they are remarkably affordable. This is because most Lutron test and measurement devices will only have the functions that you need. Some more devices will very like have many features that you may never use, but you still pay for.

RADAR LEVEL SENSORS VS ULTRASONIC LEVEL SENSORS

Radar and Ultrasonic level sensors (also known as level transmitters) are used in similar applications as both products use the "time of flight" principle to measure the level within a vessel, but what are the differentiating factors between the two?

Ultrasonic Level Sensors

Ultrasonic level sensors transmit sound waves down into the vessel, which reflect from the surface of the liquid and back to the ultrasonic sensor. The time taken for the transmitted signal to reach the surface of the liquid and travel back to the sensor, determines the level within the tank or vessel. Ultrasonic level sensors are most reliable when running within an environment with stable atmospheric conditions. This is important as sporadic atmospheric conditions, such as wind (if the vessel is in open air) and temperature can influence air molecules, which affect the soundwave's ability to produce a consistent measurement.

Radar Level Sensors

Radar level transmitters work similarly to ultrasonic sensors with the primary difference being that they utilise electromagnetic radio microwaves instead of sound waves.

As for ultrasonic sensors, in a radar sensor a signal is transmitted and reflected from the surface of the liquid back to the level meter, determining the level of the liquid stored in the vessel.

Radar sensors are not impacted by changes in atmospheric conditions in the same way ultrasonic level meters, making them more useful in less controlled and challenging environments.

Furthermore, the radar signal is less affected by turbulence on the liquid surface. Radar systems are also capable of differentiating between surface foam and the liquids surface.

It should be noted that both Radar transmitters and Ultrasonic sensors have a "deadland" area directly in front of the sensor head, where liquid cannot be detected. This is usually within a few hundred millimetres, which can lead to inconsistent measurement or errors. However, Radar often has a shorter deadland range than an Ultrasonic device.

Summary

The most notable difference between Ultrasonic and Radar level sensors is their ability to perform consistenly in more challenging environments and of course price.

Radar has historically been a more expensive technology. It has often been said that radar level sensors are the expensive solution for all those difficult applications, where ultrasonic struggles to get a reliable result. However, it should be noted that Pulsar Measurement is bridging the technology gap, refining both ultrasonic and radar level transmitter technology and closing the price gap.

Talk to ADM about the best solution to your needs/ application.

Don't hesitate to contact ADM on 1300 236 467, if you would like to discuss whether a radar or an ultrasonic solution is the better choice for your application.

PRESSURE TRANSMITTERS AND PRESSURE SWITCHES:
SAFEGUARDING FIRE SUPPRESSION SYSTEMS

When it comes to fire safety, every detail matters. From smoke detectors to sprinkler systems, building managers and facility operators must ensure that all components are always in optimal working condition. One critical aspect of fire safety is maintaining the integrity of fire hoses and suppression networks. This is where pressure transmitters and pressure switches play a vital role.

The Role of Pressure Transmitters and Pressure Switches

1. Constant Pressure Monitoring

Fire hoses and suppression pipelines are required to be ready to spring into action when needed. They must remain under constant pressure, so that they can deliver water immediately as required. Pressure transmitters and pressure switches are strategically fitted along these supply lines to monitor pressure levels continuously.

2. Detecting Compromised Water Supply

The loss of pressure in a system is a clear red flag. It signals that something is amiss with the water supply. Whether due to a leak, a closed valve, or a malfunctioning pump, any drop in pressure could compromise the effectiveness of fire suppression systems. Pressure transmitters and switches instantly detect deviations from the specified vnorm.

3. Signalling the Building Management System (BMS)

When pressure anomalies occur, the signal—whether it's an on/off switch or an analogue reading—is relayed to the Building Management System (BMS). The BMS is the central nervous system of a building, overseeing various functions, including fire safety. Upon receiving the pressure-related alert, the BMS raises the alarm, notifying facility personnel of the fault condition.

4. Swift Rectification

Time is of the essence during emergencies. Thanks to pressure transmitters and switches, faults are promptly identified, allowing maintenance teams to take immediate action. Whether it's repairing a leak, adjusting valves, or troubleshooting the pump. The goal: restore the water supply's integrity and ensure that fire suppression systems remain fully operational.

Conclusion

Pressure transmitters and pressure switches may not be the most glamorous components in a building, but their role in fire safety is indispensable. They silently monitor, detect, and communicate—ensuring that fire hoses and suppression networks are always ready to protect lives and property.

If you are looking for a suitable pressure switch or pressure transmitter for a fire safety application, then please do not hesitate to our team today.

OUR SUPPLIERS

MEAN WELL
POSITAL
ADELSYSTEM make your system better
pulsar MEASUREMENT

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