

# THERMAL CONTROL

## BUSINESS UPDATE

India's complete HVACR magazine



**16** *Liquid immersion cooling fostering sustainable data centres*

**28** *Efficient moisture removal from compressed air using a refrigerated dryer*

**34** *AQI at a severe level in major cities*

# Sustainable Cooling Technologies for Data Centres

The world will come to a halt, with countries bearing millions of losses if cyberspace comes to rest even for a day. While data consumption is rising and the world is running over the internet, the emphasis on data centres is at its peak. The global soaring temperature makes us note that the temperature of centres where huge amounts of data are stored is also maintained for smooth functioning. Industry experts share their bits about the problem, its solution, and a better future.



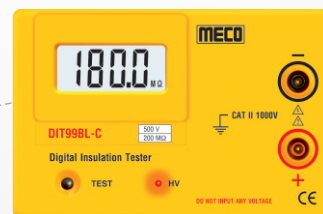


**+60** YEARS  
ONE MISSION

## Insulation Testers

**Poor Insulation Can Cause Electric Shock & Loss !!  
Check Insulation of Cable & Equipment Periodically.**

- ✓ **Single Person** Push Button Operation
- ✓ **High Accuracy**
- ✓ **Meets** IEC 61010, Installation Category II
- ✓ **Designed** to Confirm IS 10656 - 1983
- ✓ **7 Models** (MC 900 Series)
- ✓ **5 Models** (DIT99BL Series)
- ✓ **Sharp Backlight** Display (DIT99BL Series & DIT 954)
- ✓ **H. V. Safety** Warning (DIT99BL Series, DIT 918 & DIT 954)
- ✓ **Battery** Adaptor



Reliable



Long-Lasting



Affordable

ISO 9001-2015 Certified Company

**MECO INSTRUMENTS PRIVATE LTD.**

EL-1, MIDC Electronic Zone, TTC Industrial Area, Mahape, Navi Mumbai - 400710, Maharashtra, INDIA



Sales : +91-93233 32435 North India & Goa : +91-93244 11558 South India : +91-93242 89268  
East India, M.P. & Gujarat : +91-93244 05281 Maharashtra : +91-93720 11735

Email : sales@mecoinst.com Web : www.mecoinst.com Connect With Us :   

## AIR QUALITY

due to the increasing concerns among governmental authorities in various countries regarding the need to monitor and regulate air pollution.

The impact of air pollution, particularly in low-income nations, has raised significant concerns, leading to the implementation of action plans aimed at reducing air quality index levels. This is expected to drive growth in the government segment. Within the five major geographic regions, the Asia Pacific market is poised to gain a substantial share during the forecast period. This is attributed to the high levels of air pollution in developing countries in the region, coupled with the growing initiatives by governments to monitor and control air pollution.

### Increasing air pollution

According to the World Health Organisation, 90 percent of the global population is exposed to extremely unhealthy air. Air pollution is responsible

for numerous health issues and diseases, leading to significant loss of both lives and economic resources. The increasing awareness and concern among individuals about the escalating levels of worldwide air pollution are anticipated to drive the market's expansion.

Nevertheless, the slow adoption of pollution control measures and the elevated costs of these monitoring systems are likely to serve as significant obstacles to the growth of the monitoring system market in the foreseeable future.

### Challenges and the way forward

Despite the progress in air pollution control, challenges persist. Many developing nations need more infrastructure to monitor and combat air pollution effectively. International collaboration is essential to address this global problem comprehensively.

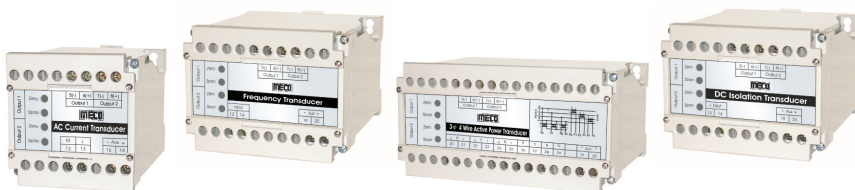
In conclusion, the battle against air pollution is far from over, but innovative control systems offer hope for a cleaner and healthier future. The collective efforts of governments, industries, and individuals are crucial in achieving sustainable air quality improvements and mitigating the consequences of this silent yet deadly enemy.

Emerging players are exploring opportunities, and various stakeholders are focusing on adjusting their market-focused strategies to align with current and anticipated future trends. The growing concern amongst governments to curb pollution and growing awareness amongst people is estimated to boost the market growth. By prioritising innovative solutions and taking decisive actions, we can pave the way for a cleaner, healthier planet for future generations. ❁

Source: <https://www.researchnester.com>  
<https://www.nrdc.org>

## MECO Power Line Transducers advanced solutions for power control and monitoring

*MECO Transducers, built with Micro Denshi Corporation expertise, adhere to stringent standards and offer reliable, isolated DC outputs proportional to inputs. They are ideal for diverse industries and automation needs and ensure precision and efficiency.*



**M**ECO Power Line Transducers are designed leveraging expertise from Micro Denshi Corporation in Japan, meeting stringent standards like IEC 688/EN 60688, EN 61010-1, EM 61326-1, and I.S. 12784 (Part 1). These transducers undergo stringent manufacturing and in-house quality control tests, ensuring reliability and accuracy, providing load-independent, isolated DC output directly proportional to input parameters.

They come in various models for AC and voltage, frequency, 1P, and 3P systems. They cater to balanced and unbalanced setups for active and reactive power (TRMS), power factor, DC isolation for voltage and current, and TAP position / OLTC type.

MECO transducers are extensively used in automating power systems and monitoring electrical parameters across generation, transmission, and distribution stages. They are ideal for SCADA, energy management,

tele-metering, data logging, and central monitoring systems. They are widely used in power utilities, railways, cement, steel, aluminium, chemicals, fertilizers, sugar, and petrochemicals.

The key features of MECO Transducers are terminal protection cover, robust static circuits, a low ripple in the output signal, flame retardant polycarbonate case, open/short circuit protection for outputs, Din rail mounting, and rapid response time. MECO Transducers offer reliability. Additionally, they offer multiple asymmetrical outputs, bi-directional outputs/inputs, wide suppressed ranges, & auxiliary supply options with self-powered or SMPS. ❁

For details, please visit our website:  
[www.mecoinst.com](http://www.mecoinst.com)  
Email: [sales@mecoinst.com](mailto:sales@mecoinst.com)