

## AN INDEPENDENT & VALIDATED ENVIRONMENTAL MONITORING SYSTEM (EMS) SOLUTION



### The Background

**Irish Power and Process (IPP)** is a leading supplier of validated Environmental Monitoring Systems (EMS), an independent back up to site Building Management Systems (BMS) systems in the Pharmaceutical, Medical Device and Laboratory industries.

BMS Systems play a vital role in the running of a manufacturing process where the monitoring and control of atmospheric changes is crucial to consistency of production, sterility of end product and comfort of operators in the working environment.

The validation of a BMS system is both a costly and timely exercise which many companies would rather avoid. The solution is the installation of an independent system that is easily validated and provides auditable records with full traceability of operation critical variables.

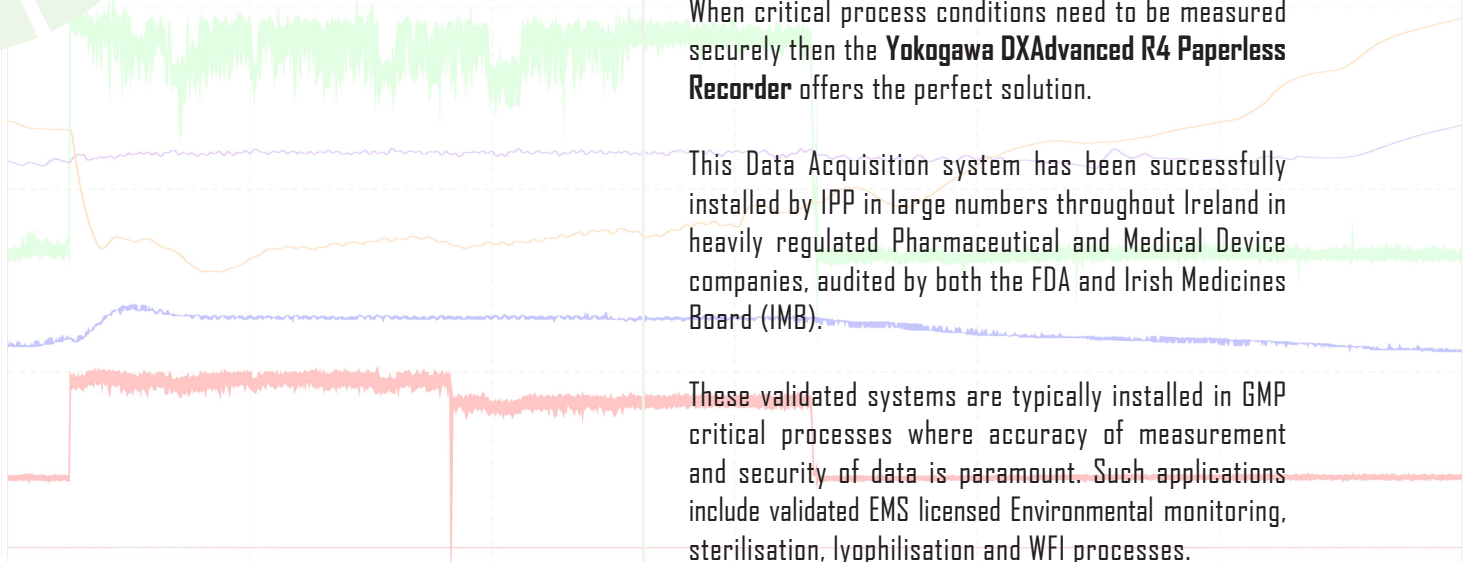
### The Key Product

When critical process conditions need to be measured securely then the **Yokogawa DXAdvanced R4 Paperless Recorder** offers the perfect solution.

This Data Acquisition system has been successfully installed by IPP in large numbers throughout Ireland in heavily regulated Pharmaceutical and Medical Device companies, audited by both the FDA and Irish Medicines Board (IMB).

These validated systems are typically installed in GMP critical processes where accuracy of measurement and security of data is paramount. Such applications include validated EMS licensed Environmental monitoring, sterilisation, lyophilisation and WFI processes.

## APPLICATION NOTE





## The Solution

In addition to providing the Yokogawa paperless system, IPP can also offer a complete turnkey EMS system to the customer, providing the knowledge of the instrumentation required and the experience of the regulations governing the monitoring of Environmental data.

The complete package that Irish Power and Process (IPP) offer includes:

This product owes its success to its ability to measure universal inputs accurately, securely and meeting ZICFR compliance.

Its Ethernet functionality allows that data to be networked so that data can be accessed from a local PC or Server. It also offers the ability to communicate or integrate where necessary with and around MES systems such as PLC's, SCADA, LIMS or Historians.

### Some of the key features of the system include:

- Secure logging of Temperature, Humidity & Differential Pressure generating binary encrypted data files.
- Maths Functionality - to generate other key process variables such as Mean Kinetic Temperature (MKT).
- Calibration Correction - providing simple functionality to calibrate sensors in a loop.
- Web view - Allowing remote viewing of live data from recorder at PC.
- Automatic transfer of data to local server using FTP protocol.
- Serial communication for interaction with other site systems.

**1 SYSTEM INSTALL:** Complete install of EMS hardware (recorder) into stainless or mild steel panels with full wiring of independent sensors (temperature and pressure) back to hardware. All channels wired back to terminals and each input individually isolated. Networking of hardware to local server to allow automatic transfer of data to server and web-view access.

**2 CONFIGURATION:** Complete configuration of hardware to ensure measurements ranged and grouped correctly. Install of Data viewing software on relevant local PC's for operators to view EMS data in detail if and when necessary.

**3 CALIBRATION:** Full system or loop calibration of the EMS sensors/probes to the paperless recorder and supply of accredited calibration certs on completion.

**4 VALIDATION:** Supply of full IQ/OQ documentation for hardware and associated software with availability of Yokogawa Validation Engineer to provide full validation execution service.

**5 TRAINING:** Full on-site training for operators on EMS hardware and software and supply of training certificates on successful completion.



For further information on the IMS system or to arrange a demo visit, please contact:

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