The prospect of adding wireless devices to the process automation architecture is compelling due to the potential business benefits and tangible operational improvements. Owner-operators are increasingly aware of the potential to apply wireless to key challenges, such as improving process performance, reliability, and efficiency; and easing regulatory compliance.

One trend that has major implications for the adoption of wireless technology is the Industrial Internet of Things (IIoT). Because wireless is a key enabling technology for connectivity, it will allow the proliferation of sensors at the device level necessary to funnel data to the IIoT.

Many initial applications for wireless devices in the process industries are focused on adding incremental points to improve control strategies or meet safety or environmental regulations. In many cases, these installations are driven by the ability to take measurements that were previously unattainable, often because the target is in a difficult-to-reach location or mobile.

As wireless device adoption accelerates, the market emphasis will move from these incremental point additions to more comprehensive wireless installations.

Users have embraced wireless technology in the plant but could be taking it further. This study answers key strategic questions, such as:

- How will Industrial IoT affect adoption of wireless in the plant?
- How will concerns over device power and security impact the prospects for wireless adoption?
- Will security concerns inhibit deployment of internet-connected devices?

RESEARCH Focus Areas

Vibration Transmitters
Wireless Access Points
Market Shares by Application
Condition Monitoring
Data Acquisition
Maintenance
Process Control
SCADA
Security
Tank Farm Monitoring
Market Shares by Network Range
Market Shares by Radio Spectrum
Market Shares by Wireless Frequency
Markets by Hazardous Location
Markets by Environmental Rating
Markets by Distribution Channel
Markets by Customer Type

This research is available as a Market Intelligence Workbook (Excel) and/or a concise, executive-level Market Analysis Report (PDF), with or without detailed charts.

STRATEGIC ISSUES

Wireless Devices in Process Manufacturing

[Graph showing wireless devices in process manufacturing from 2018 to 2023]

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