

# THE INDUSTRIAL INTERNET OF THINGS FROM MOTOROLA SOLUTIONS



THERE IS EXPECTED TO BE **75 BILLION** CONNECTED DEVICES BY **2025**<sup>1</sup> WHICH WILL GENERATE A MASSIVE AMOUNT OF DATA EQUIVALENT TO **44 ZETTABYTES**<sup>2</sup>

**THIS UNPRECEDENTED AMOUNT OF GENERATED DATA WILL NEED TO BE:**



## CONNECTIVITY HUB

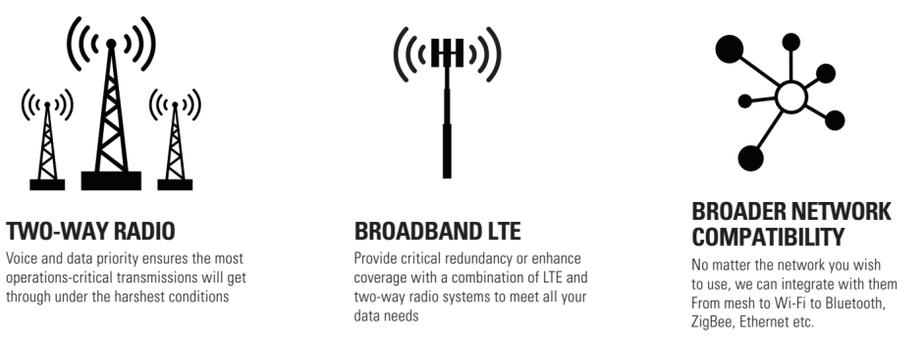
Connect all of your remote sensors and actuators to the expansive communication capabilities of the ACE family of SCADA remote terminal units and intelligent radio modems. Seamlessly connect work-flows, people, and processes to real-time information for complete process automation and remote monitoring capabilities.



**ACE3600 RTU** Operations-Critical SCADA Solution  
**ACE1000 RTU** SCADA Simplified  
**ACE1000-IRM** M2M data transmission across MOTOTRBO  
**IRM1500** M2M data transmission across ASTRO 25

## TRANSMITTED

Extend the capabilities of your reliable two-way radio voice network to include data communication for process automation and monitoring with the connectivity hub. Eliminate recurring commercial network charges and minimize expensive hard-wiring, giving you a cost effective approach to improve your operational efficiency for increased productivity and safety.



**TWO-WAY RADIO** Voice and data priority ensures the most operations-critical transmissions will get through under the harshest conditions  
**BROADBAND LTE** Provide critical redundancy or enhance coverage with a combination of LTE and two-way radio systems to meet all your data needs  
**BROADER NETWORK COMPATIBILITY** No matter the network you wish to use, we can integrate with them. From mesh to Wi-Fi to Bluetooth, ZigBee, Ethernet etc.

## SECURITY



**INSULATE THE INTELLIGENCE AT THE HEART OF YOUR OPERATIONS** Provide critical layers of protection for all points of entry between your computers, system servers, communication networks and the outside world.  
**STRENGTHEN YOUR COMMUNICATIONS BRIDGE** Protect your communications network with security solutions for proactive threat detection, real-time correction and the ability to respond to minimize risk and enhance protection.  
**EXTEND PROTECTION TO THE EDGE WITH ACE3600 RTU** Protect all points of entry, limit points of vulnerability and prevent attempts to compromise any part of your systems and data with the security of the ACE3600.

## FURTHER SAFEGUARD YOUR INDUSTRIAL INTERNET OF THINGS

Rely on our expertise to help ensure protection of your entire operations from devices in the field to the servers in the control room – and the networks that connect them all together.

- Security Update Server (SUS):** Pretested anti-malware definitions and applicable security patches for your ASTRO 25 system ensures operations are not disrupted when updates are installed onto your system.
- Security Monitoring:** Leverage our team of experienced security professionals remotely monitor your system from our Security Operations Center (SOC) for potential intrusions and detecting malicious outbreaks from external and internal vectors.
- Cybersecurity Professional Services:** A comprehensive process for identifying, assessing and managing cybersecurity risk throughout your systems.

## DISPLAYED



The IIoT Portal provides visibility across your operations in an interactive and intuitive interface giving you the ability to visualize data on a single screen. Data visualization delivers insights into your operations and empowers your decision making abilities helping you to predict and plan for the future. The IIoT portals have been intuitively designed so you can complete critical tasks in seconds to avoid last-minute panics.

## VERTICAL AREAS OF EXPERTISE

 <p><b>MASS NOTIFICATION AND SMART SIREN SOLUTION</b></p> <ul style="list-style-type: none"> <li>• Imminent Flood Warning</li> <li>• Early Local Warnings</li> <li>• Automated Public Announcements and Sirens</li> <li>• River Water Level Monitoring and Historical Data Analysis</li> <li>• Tipping Bucket Rain Collector Sensor</li> <li>• Automatic Dispatch Rescue Teams</li> <li>• <b>And Many More...</b></li> </ul>	 <p><b>SMART SECURITY</b></p> <ul style="list-style-type: none"> <li>• Perimeter Monitoring and Control</li> <li>• Gate Control (Internal and External)</li> <li>• Entrance Control</li> <li>• Emergency Buttons</li> <li>• Noise Control</li> <li>• <b>And Many More...</b></li> </ul>	 <p><b>WATER AND WASTEWATER</b></p> <ul style="list-style-type: none"> <li>• Remote Control Water Equipment</li> <li>• Reservoir Monitoring</li> <li>• Water Quality Monitoring</li> <li>• Dynamic Pressure Control</li> <li>• Power Consumption Reduction</li> <li>• Pump Efficiency Monitoring</li> <li>• Water Leak Detection</li> <li>• Trending &amp; Analysis</li> <li>• <b>And Many More...</b></li> </ul>	 <p><b>ELECTRIC UTILITIES</b></p> <ul style="list-style-type: none"> <li>• Substation Protection Relays</li> <li>• Circuit Breaker Reclosers</li> <li>• Fault Isolation and System Restoration</li> <li>• Remote Control of Capacitor Banks</li> <li>• Power Quality Monitoring</li> <li>• Remote Control Line Switches</li> <li>• Fault Passage Sensing</li> <li>• <b>And Many More...</b></li> </ul>	 <p><b>OIL AND GAS UTILITIES</b></p> <ul style="list-style-type: none"> <li>• Onshore and Offshore Production Fields</li> <li>• Metering at Remote Gathering and Distribution Stations</li> <li>• Pressure and Flow Monitoring Along Pipelines</li> <li>• Monitoring Levels at Tank Farms and Storage Facilities</li> <li>• Ship Loading Control</li> <li>• Support Leak Detection Systems</li> <li>• Remote Monitoring and Control of Pipeline Cathodic Protection</li> <li>• Valve Control</li> <li>• <b>And Many More...</b></li> </ul>
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## WHO CAN HELP YOU?

The Industrial Internet of Things from Motorola Solutions will help operations around the world drive more efficient production and provide greater operational reliability. We help advance safer and more productive workflows to help you achieve greater supply reliability, safeguard quality, drive intelligent production, and defend against evolving cyber attacks. Our extensive partner ecosystem includes those certified to develop, integrate and deploy Industrial IoT solutions.

For more Information please visit [www.motorolasolutions.com/industrialiot](http://www.motorolasolutions.com/industrialiot)

**SOURCE**  
 1. IHS Technology White Paper IoT Platforms: Enabling the Internet of Things  
 2. IDC Report on Growth of Digital Data