Ericsson Industry Connect

Advanced connectivity for Industry 4.0
Improve the way your connected devices connect

Ericsson Industry Connect is a private cellular network for industrial environments. It enables high device density, predictable latency and reliable coverage throughout the factory or warehouse. It is highly resistant to intrusions and attacks, so critical operations meet the most stringent security requirements.

Why go cellular?

Be more agile. Doing away with cables makes it quicker, easier and more cost-effective to reconfigure production lines and supply chains to meet customer demand. Plus, cellular connectivity makes retooling the way you do business uncomplicated, whether it’s the ease and convenience of bringing on a new line or changing up the warehouse picking and packing process to prepare for a peak season.

Be more productive. Advanced connectivity enhances process monitoring and product inspection and enables remote assistance from experts helping to address production issues in real-time. Advanced connectivity also makes it easier to extend both uptime and equipment life. Real-time data enables predictive maintenance to ensure that equipment is up and running for longer periods of time.

Be safer and more secure. From automated guided vehicles (AGVs) with collision avoidance to remote control of equipment in hazardous areas, advanced connectivity reduces risks in industrial environments. For additional security, the enterprise has full control over which devices can run on the network.

Be ready. Introduce cellular connectivity today and be prepared to transition to 5G as soon as it rolls out.

High reliability
Cover large industrial environments without disrupting operations because cellular connectivity eliminates dead spots.

Device density
Support more connected devices per square meter to expand the use of automation.

Consistent latency
Speed reaction times for apps like collision avoidance and real-time navigation – even across varying network loads.

Connecting farther, faster
Ericsson Industry Connect makes it possible to connect cyber-physical systems to enable faster, more flexible and more efficient processes that lift manufacturing productivity and profitability and boost competitive advantage.

Robust security
Control all connected devices because you write the SIM cards and choose whether to keep all data on-premise for heightened security.

Predictable cost
Know exactly what to budget for higher capacity that is always on. No extra per-gigabyte data charges.

Proven technology
Rely on what works. For more than a decade, LTE technology has been connecting cell phones the world over.

Easy to deploy
What does it take to move to Industry Connect? Just a couple of units of rack space and a few Ericsson Radio Dots installed on the ceiling of your facility. Once the Radio Dots are in place, you’ll be up and running in 2 hours or less.
## Technical data

### Characteristics

| Range | — Up to 6000 sqm (64,500 sq ft) with base package with eight cellular access points.  
|       | — Expansion packages are available to address larger areas |
| Device support | Base package tested with up to 1000 simultaneously connected devices |

### Radio

**Ericsson Radio Dot System (RDS)**
- Ericsson Radio Baseband
- Customized with pre-configured Radio Area Network software to meet individual factory or warehouse requirements
- Coordinates operating small cells in large multi-antenna indoor environments: combined cell, carrier aggregation, lean carrier, uplink and mixed mode

**Ericsson Indoor Radio Unit (IRU) redundancy**
- Located between the customer site fixed IP network and the LTE radio network provided by the Ericsson Radio System components.
- Integrates the Industry Connect network with an LTE packet core network and its management.

**Ericsson Radio Dots**
- Discrete and easy to install with a single CAT 6a/7 cable per Radio Dot
- Powered and controlled by Radio Baseband and IRU
- Available radio options: LTE Band 48 (CBRS), LTE Band 7, LTE Band 43, other bands available on request
  - U.S.: LTE Band 48
  - Europe: LTE Band 7 and Band 43

**Ericsson Micro Radios**
- Integrated Antenna
- Connects via fiber optic cable directly to the Radio Baseband

### Network management and control

**Network controller**
- High availability with 1+1 redundancy
- Based on dual server to operate cellular packet core network software
- In-service upgrades

**Network monitoring service**
- Available through Ericsson Network Operations Centers

**Network management**
- Self-care portal with intuitive user interface
- Centralized dashboard for a single overview of all sites
- Overview and configuration of all network equipment including self-discovery
- Per site analytics with counters and key performance indicators (KPIs)
- Management of network segments to separate device traffic and manage up- and down-link traffic quotas

### SIM Card Management

**SIM card writer with SIM cards**
- Instant and secure self-provisioning of SIM cards for cellular devices with uSIM technology
## Product Packages

<table>
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<tr>
<th>Package Type</th>
<th>Included Items</th>
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| **Network Controller Base package** | 2 industrial network controllers  
                               | 1 Baseband 6630  
                               | 1 Baseband Power Unit  
                               | 1 SIM card writer  
                               | 50 SIM cards  
                               | 1 Baseband Power Unit  
                               | 1 SIM card writer |
| **Radio Dot B7 package**          | 1 IRU 2242 with remote IRU enclosure  
                               | 8 Radio Dots, RD 2243, Band 7 |
| **Radio Dot B48 CBRS package**   | 2 IRU 2242 with remote IRU enclosures  
                               | 8 Radio Dots, RD 4442, Band 48 CBRS |
| **Radio Dot B78L package**       | 1 IRU 8846  
                               | 8 Radio Dots, Dot 4479, Band 43 |
| **Micro Radio B7 package**       | 1 Radio 2203  
                               | 1 Support 6501  
                               | 1 Antenna 6504 |
| **Micro Radio B48 CBRS package** | 1 Radio 2208  
                               | 1 Support 6501  
                               | 1 Antenna 6550 |

### Why Ericsson

- Ericsson is one of the most active companies in cellular network standardization (3GPP) and a driver of 5G. Ericsson Radio Systems are 5G-ready and have been since 2015.
- Ericsson cellular networks are used by Tier-1 operators worldwide. Forty percent of the global mobile traffic is running through Ericsson cellular networks, connecting about 2.5 billion subscribers.
- Ericsson engages with major industry players globally and is fast-tracking smart manufacturing in its own factories in Sweden, Estonia, China and Brazil.
- Ericsson is present in more than 180 countries worldwide with its 95,000 employees.