Eaton industrial wireless—full range of robust wireless solutions

For over 30 years, Eaton's ELPRO wireless business has helped companies in more than 80 countries improve the management of their assets by offering a full range of reliable and secure wireless communication systems. Eaton's wireless business has a full range of products to help your facility safely and reliably use wireless technology to accomplish even your most critical needs. Our products can be used in a variety of applications, including water/wastewater, oil and gas, mining, logistical warehousing, utility, solar and industrial automation.

We specialize in connectivity solutions for long-haul data communications in both licensed and licensed-free bands.

We offer scalable solutions from basic point-to-point connection to large scale mesh deployments. Our solutions also cover both machine-to-machine and field instruments to control rooms.

Comprehensive solutions

Eaton's industrial wireless solutions can provide the most fundamental improvement in process automation. Innovative customers are using wireless to raise their overall equipment effectiveness, enhance safety and improve production quality. Coupled with far lower capital deployment costs, wireless infrastructure has moved beyond a convenience to a competitive advantage and an essential building block for automation.

Gain flexible control to streamline operations for greater quality and improved information management. We offer solutions that extend the boundary of monitoring and control into the most challenging and remote environments.

Integrate critical processes and manage the growing diversity of automation technologies. We support the integration into existing systems and environments controlled by SCADA, DCS, PLC or PC-based automation, enabling you to choose the best solution for your needs.

Increase productivity at production startup, meet compliance deadlines and resolve ongoing maintenance problems. We help you gain insight into local and remote sites, conserving your resources and budget.

Improve safety by reducing or eliminating the need to expose workers to existing or potential hazards. Our solutions serve critical applications ranging from mine slope wall detection to safety shower alerts.

Reduce total costs with simple to complex wireless architectures, and over small or large sites. We provide wire-free economics while delivering wire-like reliability.

E·T·N
Powering Business Worldwide

Wireless I/O

Eaton offers a full range of wireless I/O modules that can transmit both digital and analog signals over the wireless network. Cutting-edge meshing capabilities provide industry-leading reliability to ensure devices always stay within network. Expansion I/O is available to support even the largest of networks.

Unidirectional
- 869 MHz: 105U-L-T/R
- 900 MHz: 905U-L-T/R

Unidirectional
- 869 MHz: 505U-K
- 900 MHz: 905U-K

Bidirectional transceiver
- 148–512 MHz, 869 MHz: 105U-1,2,3,4
- 900 MHz: 905U-1,2,3,4

Mesh I/O at 869/900 MHz
- 915U-2

Expansion I/O—I/O to serial
- 115S-11,12,13

I/O to Ethernet
- 115E-2

400 MHz Wireless I/O
- 415U-2

Wireless fieldbus gateways

Eaton offers gateways available in nearly all industrial control protocols, allowing your new wireless network to seamlessly communicate with any existing network infrastructure, making implementation of wireless solutions simple and reliable.

EtherNet/IP, Modbus® TCP/IP
- 148–512, 869 MHz: 105U-G-ET1
- 900 MHz: 905U-G-ET1

Modbus RTU, DF1
- 148–512, 869 MHz: 105U-G-MD1
- 900 MHz: 905U-G-MD1

PROFIBUS® DP (Master/Slave)
- 148–512, 869 MHz: 105U-G-PR 1/2
- 900 MHz: 905U-G-PR 1/2

DeviceNet™ (Slave)
- 148–512, 869 MHz: 105U-G-DE1
- 900 MHz: 905U-G-DE1

Modbus Plus (Slave)
- 148–512, 869 MHz: 105U-G-M+1
- 900 MHz: 905U-G-M+1

Modbus and DNP3
- 115E-2

Modbus and DNP3
- 400 MHz: 415U-2

Modbus TCP/RTU (Master/Slave)
- 869 MHz: 915U-2-869
- 900 MHz: 915U-2-900

Wireless Ethernet

Ethernet is increasing in capability and importance in today's world. Eaton is on the forefront of this technology, offering Ethernet data solutions in several radio frequency bands that provide users the flexibility of selecting a technology matching their own unique application requirements. Full product portfolio includes licensed and unlicensed frequencies, as well as a full line of Ethernet networking solutions and modems. These products also help in replacing the Ethernet cables.

Licensed 360–512 MHz ❶
• 450U-E

Licensed 928–960 MHz
• 950U-E (coming soon)

License-free 869/900 MHz
• 805/905U-E

License-free 900 MHz
• 945U-E

802.11a at 5.8 GHz
• 245U-E-A

802.11b/g at 2.4 GHz
• 245U-E-G

Managed/unmanaged Ethernet switches

Wireless serial

Eaton's serial products are available in both licensed and license-free options. They connect to PLCs, SCADA, DCSs and other serial devices and are highly scalable from small to large networks. These products also help in replacing serial cables.

60 MHz
• 455U-D-60

148–512 MHz
• 455U-D

869/900 MHz
• 805/905U-D

Cellular

Eaton offers a powerful set of cellular broadband routers that work with multi-service providers at both 3G and 4G network speeds.

3G cellular
• 615M-1

4G/LTE cellular
• 645M-1

GSM/GPRS router
• 605M-R1

❶ Licensed-free options available in EMEA and Australia.

At Eaton, we're energized by the challenge of powering a world that demands more. With over 100 years experience in electrical power management, we have the expertise to see beyond today. From ground-breaking products to turnkey design and engineering services, critical industries around the globe count on Eaton.

We power businesses with reliable, efficient and safe electrical power management solutions. Combined with our personal service, support and bold thinking, we are answering tomorrow's needs today. Follow the charge with Eaton. Visit eaton.com/electrical.

Follow us on social media to get the latest product and support information.

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