








Automotive

Industrial

Industrial Plus

Terminals

Product	BGS2	BGS5	EHS5	EHS6	EHS8	ELS31/ELS51	ELS61
							
Radio Technology 2G-4G	GPRS	GPRS	HSPA	HSPA	HSPA	LTE	LTE
Max. Data Rate DL/UL	Multislot Class 10 85.6/42.8 kbps (DL/UL)	Multislot Class 12 85.6/85.6 kbps (DL/UL)	7.2/5.7 Mbps (DL/UL)	7.2/5.7 Mbps (DL/UL)	7.2/5.7 Mbps (DL/UL)	Cat 1 10.3/5.2 Mbps (DL/UL)	Cat 1 10.3/5.2 Mbps (DL/UL)
Regional Focus	BGS2-E EMEA/APAC BGS2-W Global	Global	EHS5-E EMEA/APAC EHS5-US NORAM	Global	Global	ELS31/51-V NORAM ELS31/51-J Japan ELS31/51-US NORAM	ELS61-E EMEA ELS61-US NORAM ELS61-AUS Australia
Frequency Bands	BGS2-W 2G Quad Band BGS2-E 2G Dual Band	2G Quad Band	EHS5-E 3G (8,1) 2G Dual Band EHS5-US 3G (5,2) 2G Dual Band	3G (1,2,5,6,8) 2G Quad Band	3G (1,2,5,6,8) 2G Quad Band	ELS31/51-V LTE (4,13) ELS31/51-J LTE (1,18,19) ELS31/51-US LTE (2,4,12)	ELS61-E LTE (1,3,8,20,(28)) 2G Dual Band ELS61-US LTE (2,4,5,12) 3G (2,4) ELS61-AUS LTE (3,5,8,28) 3G (1,5,8)
Dimensions/ Mounting	27.6 x 18.8 x 2.7 mm, LGA	27.6 x 18.8 x 2.7 mm, LGA	27.6 x 18.8 x 2.3 mm, LGA	27.6 x 25.4 x 2.3 mm, LGA	27.6 x 25.4 x 2.2 mm, LGA	27.6 x 18.8 x 2.1 mm, LGA	27.6 x 25.4 x 2.2 mm, LGA
Temperature Range	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Features							
Gemalto Security	•	•	•	•	•	•	•
Embedded Processing		Java	Java	Java	Java	Linux (only ELS51)	Java
Embedded IP Services	•	•	•	•	•	•	•
Voice Support	•	•	•	•	•	VoLTE (additional Rel.)	VoLTE (additional Rel.)
Location Based Services					GPS		On-Demand Geo Location Service
Advanced Temperature Management	•	•	•	•	•	•	•
RLS-Monitoring (Jamming Detection)	•	•	•	•	•	•	•
Interfaces							
USB		USB 2.0	USB 2.0	USB 2.0	USB 2.0	USB 2.0	USB 2.0
Serial Interfaces	UART, I ² C	UART, I ² C, SPI	UART, I ² C, SPI	UART, I ² C, SPI	UART, I ² C, SPI	UART, I ² C, SPI	UART, I ² C, SPI
Audio	Digital (I ² S, PCM), Analog	Digital (I ² S, PCM)	Digital (I ² S, PCM)	Digital (I ² S, PCM), Analog	Digital (I ² S, PCM)	Digital (I ² S, PCM)	with future release
ADC/DAC	•	•	•	•	•	•	•
Multiple GPIOs	•	•	•	•	•	•	•
Ethernet							



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Gemalto Cinterion® Wireless Modules Product Families

Gemalto's broad portfolio of Cinterion M2M Modules and Terminals delivers reliable cellular communications for any network standard from 2G to LTE including latest Machine Type Communication. The products' rugged design, unparalleled engineering and highest quality manufacturing ensures reliability in the most demanding M2M IoT environments and over the long life of solutions.

Industrial

Industrial M2M products offer efficient communication from 2G to LTE Cat.1. Benefits include flexibility, backward and forward compatibility as network standards evolve and longevity to maximize your technology investment. Smart modules powered by Java® and Linux improve cost efficiency, design simplicity and increased flexibility over life cycle.

Automotive

Automotive M2M products provide the foundation for advanced telematics and evolving connected car technology. Feature rich and engineered to withstand the extreme environments and requirements of long life on the road. Products within this family provide dedicated service, highest quality level, automotive feature set and are manufactured according to VDA 6.2 and TS16949 quality standards.

Industrial Plus

Industrial Plus M2M modules leverage the latest cellular standards to deliver high speed data and voice communications with multiband capabilities to ensure seamless coverage. They are available in local and global variants for 2G, 3G, CDMA, Multimode and LTE.

Terminals

Terminals work out of the box to quickly and easily add M2M IoT connectivity to smart enterprise applications. Available for various network standards and with the option of embedded Java, they offer a variety of standard interfaces, are fully type approved and therefore require very little integration effort.

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