

Manufacturer		Telit				u-blox		Quectel		Thales Cinterion	Sierra Wireless
Type	ME910C1-E1	ME910G1-W1	NE310H2	ME310G1-W1	SARA-N310	SARA-R510S	BG95-M2	BC66-NA	EXS62	WP7700	
Data Rate	LTE Cat M1 [kbit/s]	375u 300d	1000u 588d	-	1000u 588d	-	1200u 375d	1119u 588d	-	1100u 300d	375u 300d
	LTE Cat NB1 [kbit/s]	62u 21d	-	-	-	-	-	70u 32d	-	-	65u 27d
	LTE Cat NB2 [kbit/s]	-	160u 120d	160u 120d	160u 120d	140u 125d	141u 125d	158u 127d	151u 103d	158u 124d	-
	GPRS [kbit/s]	ME910C1-E2: 236u 296d	ME910G1-WW: 210u 264d	-	ME310G1-WW: 210u 264d	-	-	BG95-M3: 85u 107d	BC66-M66: 85u 85d	EXS82: class 10	-
GPS/GNSS bundling	•				•		•		-	•	
GPRS module with same pinout	yes (-E2)	yes (-WW)	no	yes (-WW)	-	-	yes (-M3)	yes (M66)	yes (-B2)	yes (-B2)	
Interfaces	AT Command Interface	UART USB	UART USB	UART	UART USB	UART	UART	UART USB	UART	?	UART USB
	GPIO	10	10	6	6	5	6	9	0	?	18
	USB	•	•	•	•	-	•	•	•	•	•
	SPI	•	•	•	•	-	•	-	-	•	•
	I ² C	•	•	•	•	-	•	•	-	•	•
	ADC Input	•	•	-	-	•	-	•	-	•	4
Supply voltage (typ.)	3,8	3,8	3,3	3,8	3,8	3,8	3,3	3,3	2,6 - 4,8	3,7	
ISO16750 certificate	•	•	•	•	•	•	-	-	?	-	
Power Consumption *	LTE Cat M1	Idle: 12mA ; Active: 190mA @ 23 dBm	Idle: 9.5mA ; Active: 180mA @ 20 dBm	-	Idle: 8.1mA ; Active: 180mA @ 21 dBm	-	Idle: 1mA ; Active: 195mA @ 23 dBm	Idle: 20,6-21,2mA ; Active: 219 @ 21 dBm	-	?	Idle: 2,7mA ; Active: 235-290mA @ 23 dBm
	LTE Cat NB1	Idle: 12mA ; Active: 50mA @ 23 dBm	-	-	-	-	-	Idle: 16,4-16,8mA ; Active: 177 @ 21 dBm	-	-	-
	LTE Cat NB2	-	Idle: 9.2mA ; Active: 65-245mA @ 20/21 dBm	Idle: 0.52mA ; Active: 100-122mA @ 23 dBm	Idle: 8.0mA ; Active: 65-245mA @ 20/21 dBm	Idle: 0,8mA ; Active: 235mA @ 20 dBm	Idle: 1mA ; Active: 195mA @ 23 dBm	?	Idle: 0,25mA ; Active: 95-270mA @ 23 dBm	?	Idle: 2,7mA ; Active: 105-125mA @ 23 dBm
	PSM [µA]	8	3	4,2	3	3	0,5	3,9	3,5	?	22
IDE for onboard apps	•	•	?	?	-	-	-	-	-	•	
eSIM	• (-E2)	-	-	-	-	-	•	•	•	•	
custom HW-control AT Commands	GPIO I ² C SPI ADC	GPIO I ² C SPI ADC	GPIO I ² C SPI	GPIO I ² C SPI	GPIO ADC	GPIO	ADC		?	GPIO ADC	
Firmware Update OTA	•	•	•	•	•	•	•	•	•	?	
LwM2M support	•	•	•	•	•	•	•	•	•	optional	
End-to-end security	SSL	TLS 1.3	TLS	TLS	TLS	TLS, EAL5+	TLS	TLS	secure element	o	
IP stack and protocols	IPv4/6, TCP, UDP, FTP, HTTP, SMTP, MQTT	IPv4/6, TCP, UDP, FTP, HTTP, SMTP, MQTT	IPv4/6, TCP, UDP, FTP, HTTP; MQTT	IPv4/6, TCP, UDP, FTP, HTTP, SMTP, MQTT	IPv4/6, TCP, UDP, FTP, HTTP, MQTT	IPv4/6, TCP, UDP, FTP, HTTP, MQTT	IPv6, TCP, UCP, FTP, HTTP, MQTT	IPv6, TCP, UCP, FTP, HTTP, MQTT	IPv4/6, TCP, UDP, FTP, HTTP, MQTT	?	
MVNO offer	Telit OneEdge		?	?	u-blox Thingstream		-		?	Sierra Wireless	
IoT Cloud Support	MS Azure	MS Azure	?	MS Azure	-	AWS, Azure	(AWS, Azure for -M3)	-	"any major"	optional	
Package	28,2 x 28,2 x 2,2 mm	28,2 x 28,2 x 2,2 mm	15 x 18 x 2,3 mm	13.1 x 14.3 x 2.6 mm	96 pin LGA, 16 x 26 x 2,4 mm	96 pin LGA, 16 x 26 x 2,2 mm	23,6 x 19,9 x 2,2 mm	58 pin LCC, 17,7 x 15,8 x 2,0 mm	27.6 x 18.8 x 2.3 mm	LGA 22 x 23 x 2.5mm	
Design Support	Several evaluation boards and design kits. Online and on-site support incl. design review (customer qualification req'd). No forum.				eva boards, one-to-one support case, public forum		eva boards, public forum		no public support offer	eva boards (w full doc), customer community	
Price	△	◇▽	▽	◇	▽	△	◇	▽	▽	△△	



Used symbols: "•" means supported, "o" means not supported, "-" means optional support, "?" not clear

Notes:

* = Power consumption depends on usage conditions like frequency band and applied PSM and DRX/eDRX timing parameters. Please see article text and product documentation. Latest update: Jan 7, 2021