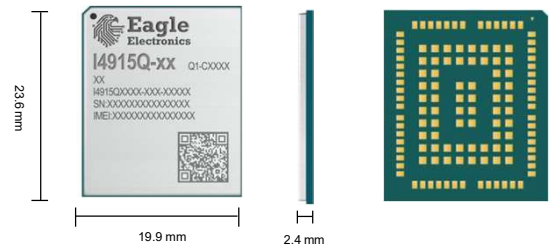


Eagle I4915Q

IoT/M2M-optimized
LTE Cat 1.bis Module



Eagle I4915Q series is a series of LTE Cat 1 bis modules optimized specially for M2M and IoT applications. Adopting the 3GPP Rel-14 LTE technology, it delivers maximum data rates up to 10 Mbps downlink and 5 Mbps uplink. Designed in a compact and unified form factor, I4915Q series is compatible with Eagle LPWA I490 series modules and LTE Standard I491 series modules.

I4915Q series contains 2 variants: I4915Q-NA and I4915Q-AF. A rich set of internet protocols, industry standard interfaces and abundant functionalities (USB serial drivers for Windows 8.1/ 10/ 11, Linux, and Android) extend the applicability of the modules to a wide range of M2M and IoT applications, such as asset management, commercial telematics, payment, RMAC (Remote Monitoring and Control applications), smart safety and automation, smart metering and smart grid.



Key Features

- ✓ LTE-FDD Coverage
- ✓ Supports DFOTA
- ✓ Main antenna and GNSS antenna (Optional)
- ✓ LTE module in compact size
- ✓ Supports Wi-Fi Scan



LTE Cat 1 bis
Max. 10 Mbps (DL)
Max. 5 Mbps (UL)



Compact Size



LGA Package



Embedded Abundant
Protocols



DFOTA



Enhanced AT
Commands



USB 2.0 High Speed
Interface

Eagle I4915Q Family

LTE Cat 1 bis	I4915Q-NA	I4915Q-AF
Region/Operator	North America	North America
Dimensions (mm)	23.6 x 19.9 x 2.4	23.6 x 19.9 x 2.4
Weight (g)	Approx. 2.3	Approx. 2.3
Temperature Range		
Operating Temperature	-35 °C to +75 °C	-35 °C to +75 °C
Extended Temperature	-40 °C to +85 °C	-40 °C to +85 °C
Frequency Bands		
LTE-FDD	B2/ 4/ 5/12/ 13/ 66	B2/ 4/ 5/ 12/ 13/ 14/ 66/ 71
GNSS (Optional)	GPS/GLONASS/BDS/Galileo/QZSS	GPS/GLONASS/BDS/Galileo/QZSS
Certifications		
Carrier	America: Verizon/AT&T/T-Mobile Global: GCF North America: PTCRB	America: Verizon/AT&T/T-Mobile Global: GCF North America: PTCRB
Regulatory	America: FCC Canada: IC	America: FCC Canada: IC
Others	WHQL	WHQL
Max. Data Rates		
LTE-FDD (Mbps)	10 (DL)/ 5 (UL)	10 (DL)/ 5 (UL)
Interfaces		
(U)SIM	× 2 (1.8/ 3.0 V)	× 2 (1.8/ 3.0 V)
UART	× 4 (Main, Debug, GNSS and GNSS debug UART)	× 4 (Main, Debug, GNSS and GNSS debug UART)
USB 2.0	× 1	× 1
REST_N	× 1	× 1
PWRKEY	× 1	× 1
PCM (Digital Audio)*	× 1	× 1
I2C*	× 1	× 1
SPI*	× 1	× 1
Camera SPI*	× 1	× 1
ADC	× 2	× 2
USB_BOOT	× 1	× 1
GRFC	× 2	× 2
Antenna	× 2 (Main and GNSS Antennas ^③)	× 2 (Main and GNSS Antennas ^③)
Software Features		
Protocols	TCP/ UDP/ NTP/ NITZ/ FTP/ HTTP/ PING/ HTTPS/ FTPS/ SSL/ MQTT/ CMUX/ PPP/ FILE/ SMTP/ SMTPS/ MMS*	TCP/ UDP/ NTP/ NITZ/ FTP/ HTTP/ PING/ HTTPS/ FTPS/ SSL/ MQTT/ CMUX/ PPP/ FILE/ SMTP/ SMTPS/ MMS*
USB Serial Driver	Windows 8.1/10/11 Linux 2.6-6.7 Android 4.x-13.x	Windows 8.1/10/11 Linux 2.6-6.7 Android 4.x-13.x
RIL Driver	Android 4.x-13.x	Android 4.x-13.x
USB RNDIS Driver	Windows 8.1/10/11 Linux 2.6-6.7	Windows 8.1/10/11 Linux 2.6-6.7
USB ECM Driver	Linux 2.6-6.7	Linux 2.6-6.7
Enhanced Features		
DFOTA	●	●
Wi-Fi Scan	●	●
USIM Card Detection	●	●
Electrical Features		
Supply Voltage Range	3.3-4.3 V, typ. 3.8V	3.3-4.3 V, typ. 3.8V
Power Consumption (Typ.)	0.4 μA @ Power off Mode	0.4 μA @ Power off Mode
	54 μA @ Sleep Mode (AT+CFUN = 0, USB disconnected)	54 μA @ Sleep Mode (AT+CFUN = 0, USB disconnected)
	130 μA @ Sleep Mode (AT+CFUN = 4, USB disconnected)	130 μA @ Sleep Mode (AT+CFUN = 4, USB disconnected)
	4.55 mA @ Idle Mode (PF = 64, USB disconnected)	4.55 mA @ Idle Mode (PF = 64, USB disconnected)
	25.31 mA @ Idle Mode (PF = 64, USB connected)	25.31 mA @ Idle Mode (PF = 64, USB connected)

NOTE:

- ① : Both USIM1 and USIM2 interfaces support 1.8 V USIM cards only, when the USIM2 interface is enabled.
 - ② : Camera SPI and USIM2 are multiplexing pins, so they cannot be used at the same time.
 - ③ : GNSS UART, GNSS debug UART and GNSS antenna interfaces are optional.
- : supported.