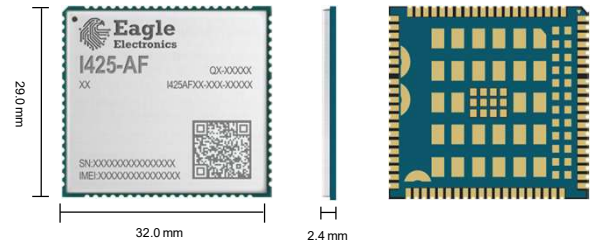


# Eagle I425-AF

## IoT/M2M-optimized LTE Cat 4 Module



Eagle I425-AF is an LTE Cat 4 module optimized specially for M2M and IoT applications. Adopting the 3GPP Rel.11 LTE technology, it delivers maximum data rates up to 150 Mbps downlink and 50 Mbps uplink. Designed in the compact and unified form factor, I425-AF is compatible with Eagle I421-AF and I42x-GL modules, which allows for flexible migration among them in design and use as well as a series of Quectel EC/EG2x modules.

I425-AF has two variants: I425-AFX and the I425-AFXD. The difference is the latter is data only and does not support any voice capabilities.

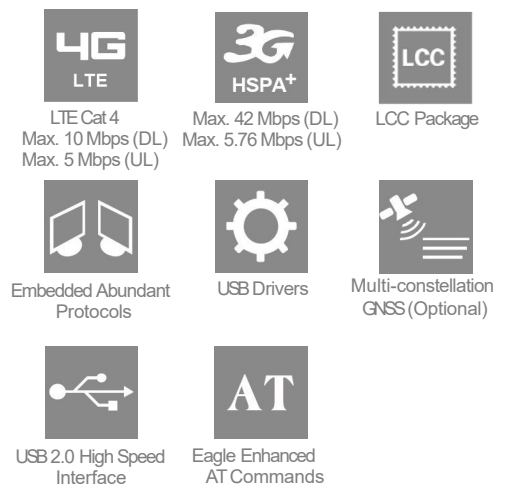
I425-AF supports Qualcomm® IZat™ location technology Gen8C Lite (GPS, GLONASS, BDS, Galileo and QZSS). The integrated GNSS greatly simplifies product design, and provides quicker, more accurate and more dependable positioning.

A rich set of Internet protocols, industry-standard interfaces and abundant functionalities (USB serial drivers for Windows 7/8/8.1/10/11, Linux, Android) extend the applicability of the module to a wide range of M2M and IoT applications such as industrial router, industrial PDA, rugged tablet PC, video transmission, and digital signage.



## Key Features

- ✓ LTE Cat 4 module optimized for M2M and IoT applications
- ✓ Worldwide LTE, UMTS/HSPA(+) and GSM/GPRS/EDGE coverage
- ✓ Multi-constellation GNSS receiver available for applications requiring fast and accurate fixes in any environment
- ✓ Feature refinements: supports DFOTA and DTMF
- ✓ MIMO technology meets demands for data rate and link reliability in modem wireless communication system



# Eagle I425-AF

LTE Cat 4	I425-AFX	I425-AFXD (Data Only)
Region/Operator	North America	North America
Dimensions (mm)	29.0 × 32.0 × 2.4	29.0 × 32.0 × 2.4
Weight (g)	Approx. 4.9	Approx. 4.9
<b>Temperature Range</b>		
Operating Temperature	-35 °C to +75 °C	-35 °C to +75 °C
Extended Temperature	-40 °C to +85 °C	-40 °C to +85 °C
<b>Frequency Bands</b>		
LTE-FDD	B2/4/5/12/13/14/66/71	B2/4/5/12/13/14/66/71
LTE-TDD	-	-
WCDMA	B2/4/5	B2/4/5
TD-SCDMA	-	-
GSM/EDGE	-	-
GNSS (Optional)	GPS/GLONASS/BDS/Galileo/QZSS	GPS/GLONASS/BDS/Galileo/QZSS
<b>Certifications</b>		
Carrier	<b>America:</b> Verizon/AT&T/T-Mobile	<b>America:</b> Verizon/AT&T/T-Mobile
Regulatory	<b>Global:</b> GCF <b>North America:</b> PTCRB <b>America:</b> FCC	<b>Global:</b> GCF <b>North America:</b> PTCRB <b>America:</b> FCC
Others	RoHS/WHQL	RoHS/WHQL
<b>Max. Data Rates</b>		
LTE-FDD (Mbps)	150 (DL)/50 (UL)	150 (DL)/50 (UL)
LTE-TDD (Mbps)	-	-
DC-HSPA+ (Mbps)	42 (DL)/5.76 (UL)	42 (DL)/5.76 (UL)
WCDMA (kbps)	384 (DL)/384 (UL)	384 (DL)/384 (UL)
EDGE (kbps)	-	-
GPRS (kbps)	-	-
<b>Interfaces</b>		
(U)SIM	× 1	× 1
UART	× 2 (Main & Debug UART)	× 2 (Main & Debug UART)
USB 2.0	× 1	× 1
SDIO	× 1	× 1
Digital Audio (PCM)	× 1	× 1
ADC	× 2	× 2
<b>Voice</b>		
Speech Codec Modes	HR/FR/EFR/AMR/AMR-WB	-
Echo Arithmetic	Echo Cancellation/Noise Suppression	-
VoLTE (Optional)	Digital Audio and VoLTE (Voice over LTE)	-
<b>Enhanced Features</b>		
DTMF	●	-
DFOTA	●	●
QMI/RmNet	●	●
Audio Playback/Audio Recording	Optional	-
QuecOpen®	-	-
QuecFile®	●	●
(U)SIM Card Detection	●	●

# Eagle I425-AF

LTE Cat 4	I425-AFX	I425-AFXD (Data Only)
<b>Software Features</b>		
<b>Protocols</b>	TCP/UDP/PPP/FTP/HTTP/NTP/PING/QMI/NITZ/S MTP/MQTT/CMUX/HTTPS/FTPS/SMTPTS/SSL/M MS/FILE	TCP/UDP/PPP/FTP/HTTP/NTP/PING/QMI/NITZ/S MTP/MQTT/CMUX/HTTPS/FTPS/SMTPTS/SSL/M MS/FILE
<b>Drivers</b>		
<b>USB Serial Driver</b>	Windows 8/8.1/10/11 Linux 2.6–6.5 Android 4.x–13.x	Windows 8/8.1/10/11 Linux 2.6–6.5 Android 4.x–13.x
<b>GNSS Driver</b>	Android 4.x–13.x	Android 4.x–13.x
<b>RIL Driver</b>	Android 4.x–13.x	Android 4.x–13.x
<b>USB NDIS Driver</b>	Windows 8/8.1/10/11	Windows 8/8.1/10/11
<b>USB GobiNet Driver</b>	Linux 2.6–6.5	Linux 2.6–6.5
<b>USB QMI_WWAN Driver</b>	Linux 3.4–6.5	Linux 3.4–6.5
<b>Electrical Features</b>		
<b>Supply Voltage Range</b>	3.3–4.3 V, typ. 3.8 V	3.3–4.3 V, typ. 3.8 V
<b>Power Consumption (Typ.)</b>	7 $\mu$ A @ Power off 1.3 mA @ Sleep 15.7 mA @ Idle	7 $\mu$ A @ Power off 1.3 mA @ Sleep 15.7 mA @ Idle