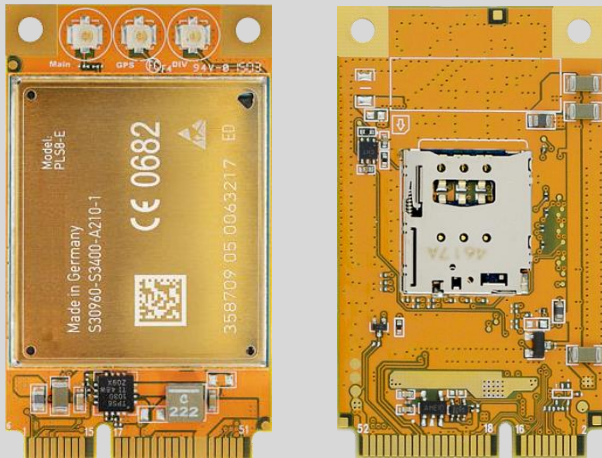




Z-PLS8-E

LTE Industrial Wireless Module



Highlights

- 100Mbps maximum data rate (LTE Rel. 9)
- Mini PCI Express form factor
- USB 2.0 HS Interface up to 480 Mbps
- Qualcomm MDM9215 chipset
- 3X u.FL antenna connectors
- Multiple OS support
- GPS / GLONASS location solutions
- Perfect for M2M Applications
- Multiple carrier / regulatory approvals
- -40°C ~ 85°C operating temperature
- Optimized for low power consumption

Optimized for the Fastest LTE Networks

The new Zcomax Z-PLS8-E industrial wireless module offers a smart solution for wireless connectivity today and in the future. With the latest LTE technology, the Z-PLS8-E is optimized for high bandwidth computing, enabling the highest available speeds for uploads and downloads in mobile networks.

The Z-PLS8 series of devices are based on the Mini PCI Express standard with a USB 2.0 interface. Supporting a wide variety of advanced air interface protocols, the Z-PLS8-E wireless module enables any mobile computing device to become an outstanding communication tool.

High-Speed Connectivity for a Wide Range of Solutions

Perfectly suited for a wide array of network applications, including ruggedized mobile computing, security solutions, medical equipment, payment systems, video streaming, mobile routing, and many others.

Location-Based Services Available

GNSS tracking lets you locate, monitor, and deploy location-based applications and services with model variants supporting GPS and GLONASS.

Z-PLS8-E Specifications

Hardware			
Chipset	Qualcomm MDM9215		
Application Processor	ARMv7 Cortex A5		
Air Interface	LTE	UMTS / HSPA+ / DC-HSPA+	GSM / GPRS / EDGE
3GPP Compliance	Release 9	Release 8	Release 98
UE Category	Category 3	DL Category 24 / UL Category 6	Class 12
Frequency	800 / 900 / 1800 / 2100 / 2600 (MHz)	900 / 1800 / 2100 (MHz)	900 / 1800 (MHz)
Bands	Bd20, Bd8, Bd3, Bd1, Bd7	Bd8, Bd3, Bd1	Dual Band
Data Speed (max)	100Mbps (DL) / 50Mbps (UL)	42.2Mbps (DL) / 5.76Mbps (UL)	237Kbps (DL) / 237Kbps (UL)
MIMO	2x2 Download	-	-
Channel Access	OFDMA / SC-FDMA / FDD	W-CDMA / FDD	TDMA / FDD
RF Characteristics	Category	Transmit Power	Class
Output power (Rel.99)	EGSM 900	33dBm \pm 2dB	Class 4
	GSM 1800	30dBm \pm 2dB	Class 1
	GSM 900 8-PSK	27dBm \pm 3dB	Class E2
	GSM 1800 8-PSK	26dBm +3/-4dB	Class E2
	UMTS 2100, WCDMA FDD Bd1	24dBm +1/-3dB	Class 3
	UMTS 1800, WCDMA FDD Bd3	24dBm +1/-3dB	Class 3
	UMTS 900, WCDMA FDD Bd8	24dBm +1/-3dB	Class 3
Output power (Rel.8)	LTE 2600, LTE FDD Bd7	23dBm \pm 2dB	Class 3
	LTE 2100, LTE FDD Bd1	23dBm \pm 2dB	Class 3
	LTE 1800, LTE FDD Bd3	23dBm \pm 2dB	Class 3
	LTE 900, LTE FDD Bd8	23dBm \pm 2dB	Class 3
	LTE 800, LTE FDD Bd20	23dBm \pm 2dB	Class 3
Antenna (Voice/Data)	LTE	UMTS / DC-HSPA+	GSM / GPRS / EDGE
Impedance	50 Ohm	50 Ohm	50 Ohm
Antenna Connector	u.FL	u.FL	u.FL
Antenna port 1	Main Antenna	Main Antenna	Main Antenna
Antenna port 2	MIMO (2x2) / Diversity	Rx Diversity Antenna	-
Interfaces / Form Factor			
Form Factor	Mini PCI Express		
Host Interface	USB 2.0 High Speed (480Mbit/s)		
UICC / SIM Electrical Interface	1.8V / 3V 4-Wire interface via Mini PCI Express		
UICC / SIM Socket <i>(optional)</i>	Micro SIM, 1.8V / 3V		
Audio <i>(optional)</i>	PCM digital interface		
Reset	Signal line to reset module		
Status	Signal line to indicate the network connectivity state		
Dimensions	51.0mm (L) x 30.0mm (W) x 4.75mm (H)		
GNSS Location Solution (Optional*)			
Technology	Qualcomm gpsOneGen8A with GLONASS		
Supported Systems	GPS / GLONASS		
Protocol	NMEA-0183 V2.3		
GNSS Antenna	Active / Passive		
Modes	Standalone GNSS / Assisted GNSS / CP E911 / UP gpsOneXTRA™		

Z-PLS8-E Specifications

Electrical	
Voltage	3.3V +/- 0.3V
Current Consumption (LTE @ 850MHz)	Sleep mode: 3mA
	Idle (USB active): 95mA
	Data transfer: 740mA
Audio (Optional)	
Operating Mode	Master / Slave
Synchronization	Short / Long
Sample Rate	8kHz / 16kHz
Bit Clock	@8kHz sample rate: 128 / 256 / 512 / 2048kHz, @16kHz sample rate: 256 / 512 / 1024 / 4096kHz
Control Options	
AT Commands	Hayes, TS 27.007, TS 27.005 & proprietary API
Driver Support	
Windows	Windows 8, Windows 7, Windows Vista, Windows XP, Windows EC
Linux	CDC-ACM compliant mode
Android	RIL driver
Regulatory & Safety Approvals	
Environmental	RoHS and REACH compliant, EuP support
RF & Safety	R&TTE, GCF, CE
Environmental	
Operating Temperature	-40 °C ~ 85°C (board temperature)
Storage Temperature	-40 °C ~ 95°C
Humidity	5 ~ 95% RH non-condensing
Ordering Information	
Z-PLS8-E	Base module
Z-PLS8-E-G	Support for GPS
Z-PLS8-E-S	Integrated SIM card slot
Z-PLS8-E-V	Support for voice
Z-PLS8-E-GS	Support for GPS and Integrated SIM card slot
Z-PLS8-E-GSV	Support for GPS, Integrated SIM card slot and voice

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