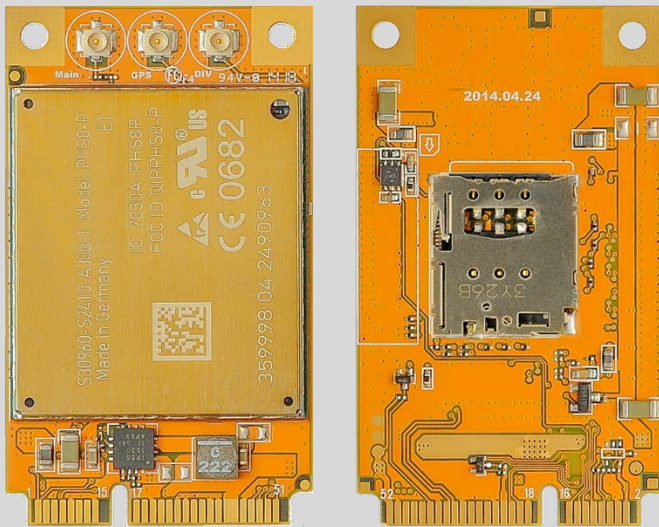




Z-PHS8-P

4G Industrial Wireless Module



Highlights

- 14.4Mbps maximum data rate
- Mini PCI Express form factor
- USB 2.0 HS Interface up to 480 Mbps
- Qualcomm MDM6200 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 4G Networks

The new Zcomax Z-PHS8-P industrial wireless module offers a smart solution for wireless connectivity today and in the future. With the latest 4G technology, the Z-PHS8-P is optimized for high bandwidth computing, enabling the highest available speeds for uploads and downloads in mobile networks.

This Z-PHS8-P is based on the Mini PCI Express standard with a USB 2.0 interface. Supporting a wide variety of advanced air interface protocols, the Z-PHS8-P 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-PHS8-P Specifications

Hardware	
Chipset	Qualcomm MDM6200

Air Interface	UMTS / HSPA+	GSM / GPRS / EDGE
3GPP Compliance	Release 8	Release 98
UE Category	DL Category 10 / UL Category 6	Class 12
Frequency	800 / 850 / 900 / 1900 / 2100 (MHz)	850 / 900 / 1800 / 1900 (MHz)
Bands	Bd19, Bd5, Bd8, Bd2, Bd1	Quad-band
Data Speed (max)	14.4Mbps (DL) / 5.76Mbps (UL)	237Kbps (DL) / 237Kbps (UL)
Channel Access	W-CDMA / FDD	TDMA / FDD

RF Characteristics	Category	Transmit Power	Class
Output power (Rel.99)	EGSM 850	33dBm ±2dB	Class 4
	EGSM 900	33dBm ±2dB	Class 4
	GSM 1800	30dBm ±2dB	Class 1
	GSM 1900	30dBm ±2dB	Class 1
	GSM 850 8-PSK	27dBm ±3dB	Class E2
	GSM 900 8-PSK	27dBm ±3dB	Class E2
	GSM 1800 8-PSK	26dBm +3/-4dB	Class E2
	GSM 1900 8-PSK	26dBm +3/-4dB	Class E2
	UMTS 2100, WCDMA FDD Bd1	24dBm +1/-3dB	Class 3
	UMTS 1900, WCDMA FDD Bd2	24dBm +1/-3dB	Class 3
	UMTS 900, WCDMA FDD Bd8	24dBm +1/-3dB	Class 3
	UMTS 850, WCDMA FDD Bd5	24dBm +1/-3dB	Class 3
	UMTS 800, WCDMA FDD Bd19	24dBm +1/-3dB	Class 3

Antenna (Voice / Data)	UMTS / HSPA+	GSM / GPRS / EDGE
Impedance	50 Ohm	50 Ohm
Antenna Connector	u.FL	u.FL
Antenna port 1	Main Antenna	Main Antenna
Antenna port 2	UMTS 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
GNSS Receiver	GPS / GLONASS
Protocol	NMEA-0183 V2.3
GNSS Antenna	Active / Passive
Modes	Standalone GNSS / Assisted GNSS (CP E911, UP gpsOneXTRA™)



Z-PHS8-P Specifications

Electrical

Voltage	3.3V +/- 0.3V	
Current Consumption (HSPA+ @ 850MHz)	Sleep mode:	1.6mA
	Idle (USB active):	70mA
	Data transfer:	810mA

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
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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, REACH compliant, EuP support
RF & Safety	R&TTE, GCF, CE, FCC, IC, PTCRB, UL
Carrier Certifications	AT&T, Bell, MTN, Optus, Rogers, Telecom NZ, Telefonica, Telstra, Telus, Vodafone

Environmental

Operating Temperature	-40 °C ~ 85°C (board temperature)
Storage Temperature	-40 °C ~ 95°C
Humidity	5 ~ 95% relative humidity non-condensing

Ordering Information

Z-PHS8-P	Base module
Z-PHS8-P-G	Support for GPS
Z-PHS8-P-S	Integrated SIM card slot
Z-PHS8-P-V	Support for voice
Z-PHS8-P-GS	Support for GPS and Integrated SIM card slot
Z-PHS8-P-GSV	Support for GPS, Integrated SIM card slot and voice

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