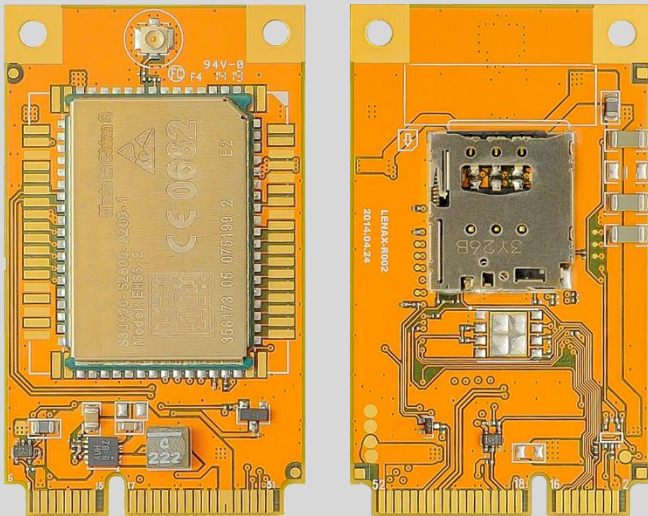




# Z-EHS5-E

## 3G Industrial Wireless Module



### Optimized for the Fastest 3G Networks

The new Zcomax Z-EHS5-E industrial wireless module offers a smart solution for wireless connectivity today and in the future. With 3G technology, the Z-EHS5-E is optimized for high bandwidth computing, enabling high transfer speeds for uploads and downloads in mobile networks.

The Z-EHS5-E 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-EHS5-E wireless module enables any mobile computing device to become an outstanding communication tool.

### Highlights

- 7.2Mbps maximum data rate
- Mini PCI Express form factor
- USB 2.0 HS Interface up to 480 Mbps
- Intel XMM 6250 chipset
- u.FL antenna connector
- Multiple OS support
- Perfect for M2M Applications
- Java Micro Edition 3.2
- Multiple carrier / regulatory approvals
- -40°C ~ 85°C operating temperature
- Optimized for low power consumption

### 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.

### Includes Java™ Open Platform

Java offers easy and fast application development, a broad choice of tools, high code reusability, easy maintenance, a proven security concept, on-device debugging as well as multi-threading programming & execution.

# Z-EHS5-E Specifications

<b>Hardware</b>	
Chipset	Intel XMM 6250
Embedded memory	10MB RAM + 10MB Flash file system

<b>Air Interface</b>	<b>UMTS / HSPA</b>	<b>GSM / GPRS / EDGE</b>
3GPP Compliance	Release 7	Release 98
UE Category	DL Category 8 / UL Category 6	Class 12
Frequency	900 / 2100 (MHz)	900 / 1800 (MHz)
Bands	Bd8, Bd1	Dual band
Data Speed (max)	7.2Mbps (DL) / 5.76Mbps (UL)	237Kbps (DL) / 237Kbps (UL)
Channel Access	W-CDMA / FDD	TDMA / FDD

<b>RF Characteristics</b>	<b>Category</b>	<b>Transmit Power</b>	<b>Class</b>
Output Power (Rel.99)	EGSM 900	33dBm ±2dB	Class 4
	GSM 1800	30dBm ±2dB	Class 1
	GSM 900 8-PSK	27dBm ±3dB	Class E2
	GSM 1800 8-PSK	26dBm +3/-4dB	Class E2
	UMTS 900	24dBm +1/-3dB	Class 3
	UMTS 2100	24dBm +1/-3dB	Class 3

<b>Antenna (Voice/Data)</b>	
Impedance	50 Ohm
Antenna Connector	u.FL

<b>Interfaces / Form Factor</b>	
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)

<b>Electrical</b>	
Voltage	3.3V +/- 0.3V
Current Consumption (HSPA @ 850MHz)	Sleep mode: 1.6mA
	Idle (USB active): 50mA
	Data transfer: 635mA

<b>Audio (Optional)</b>	
Operating Mode	Master
Synchronization	Long frame
Sample Rate	8kHz @16bit
Bit Clock	256kHz

<b>Software Control</b>	
AT Commands	Hayes, TS 27.007, TS 27.005 & proprietary API



# Z-EHS5-E Specifications

## Driver Support

Windows	Windows 8, Windows 7, Windows Vista, Windows XP, Windows EC
Linux	Yes
Android	Yes

## JAVA Open Platform

Platform	Java Micro Edition (ME) 3.2
Memory	6MB RAM and 8 MB Flash file system
Security	Secure data transmission with HTTPS / SSL
Multi-Thread Support	Multi-Threading programming and Multi-Application execution

## Regulatory & Safety Approvals

Environmental	RoHS and REACH compliant, EuP support
RF & Safety	R&TTE, CE, GCF
Carrier Certifications	MTN, Vodacom

## 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-EHS5-E	Base module
Z-EHS5-E-S	Integrated SIM card slot
Z-EHS5-E-V	Support for voice

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