



XM8200S

The XM8200S is a secure embedded Wireless LAN bridge that easily connects embedded devices to 802.11b/g Wireless LANs. It does not require any kind of WiFi driver development on the host CPU, and its Socket Modem configuration minimize the integration in the host device hardware.

Typical Applications:

- Adding WiFi to serial embedded devices.
- Replacing LAN cable using WiFi.
- Adding SSL security to M2M solutions.

Functions:

- SerialNet™ Serial to WiFi Bridge - allowing transparent bridging of Serial over WiFi, using the 3Mbps fast UART.
- PPP modem emulation – allowing existing (e.g. modem) designs currently using PPP to connect transparently over WiFi.
- Internet Controller mode – allowing to use the rich protocol capabilities to perform complex Internet operations such as E-mail, FTP, SSL, embedded web server and others. It also acts as a firewall, providing a security gap between the application and the network.
- Supports the SSL3/TLS1 protocol for secure sockets, HTTPS and FTPS, WEP, WPA/WPA2 (PSK and Enterprise) WiFi encryption.
- Standards supported: IEEE 802.11b/g.
Frequency: Europe – 2.412-2.472GHz, 13 channels
- Host Data Rates: UART: Up to 3Mbps
Serial Data Format (AT+i mode): Asynchronous character; binary; 8 data bits; no parity; 1 stop bit
- Serial Data Format (SerialNET mode): Asynchronous character; binary; 7 or 8 data bits; odd, even, or no parity; 1 stop bit

- Flow Control: Hardware (-RTS, -CTS) and software flow control.
- Internet Protocols: ARP, ICMP, IP, UDP, TCP, DHCP, DNS, NTP, SMTP, POP3, MIME, HTTP, FTP and TELNET
- Security protocols: SSL3/TLS1, HTTPS, FTPS, RSA, AES-128/256, 3DES, RC-4, SHA-1, MD-5, WEP, WPA/WPA2 (PSK and Enterprise)
- Protocols accelerated in HW: AES, 3DES and SHA
- AT+i protocol for Internet Controller mode
- SerialNET mode for transparent serial data-to-Internet bridging . LAN-WiFi transparent bridging. PPP operation mode for Modem-WiFi conversion

Specifications:

- Compact Size: 64.5 X 26.5 X 10 mm.
- Single 3.3V or 5.0V DC power supply.
- Typical Power use average: 300mA @ 5V
- Interfaces: Serial RS-232 (TTL level) and USB
- Antenna Interface: U.FL
- Operating temp.: -20°C to +75°C
- Certification: EN 300 328 (R&TTE Directive 1999/5/EC)
EN 301 489 (EMC Directive 2004/108/EC)
- Safety: UL 60950 o CAN/CSA-C22.2 No. 60950 o EN 60950, Low Voltage Directive (2006/95/EC)
- 2 Year warranty.



Ordering: **XM8200S-3V**
 XM8200S-5V

Pin Diagram		Pin No	Name	Pin No	Name
1	NC	64	NC	64	NC
2	NC	63	GND	63	GND
		62	NC	62	NC
		61	VCC	61	VCC
3..23		62	NC	62	NC
24	RESET	61	VCC	61	VCC
25	MIO	60	NO PIN	60	NO PIN
26	GND	59	NO PIN	59	NO PIN
27		58	NO PIN	58	NO PIN
28		57	NO PIN	57	NO PIN
29	WIFI LED	56	NO PIN	56	NO PIN
30		55	NO PIN	55	NO PIN
31		54	NO PIN	54	NO PIN
32		45...53	NO PIN	45...53	NO PIN
		44	USB (VCC)	44	USB (VCC)
		43	USB (+)	43	USB (+)
		42	USB (-)	42	USB (-)
24	RESET	41	GND	41	GND
25	MIO	40	DTR	40	DTR
26	GND	39	DCD	39	DCD
27		38	CTS	38	CTS
28		37	DSR	37	DSR
29	WIFI-LED	36	RI	36	RI
30		35	TXD	35	TXD
31		34	RXD	34	RXD
32		33	RTS	33	RTS
		44	USB-VCC	44	USB-VCC
		43	USB Data (+)	43	USB Data (+)
		42	USB Data (-)	42	USB Data (-)
		41	GND	41	GND
		40	DTR	40	DTR
		39	DCD	39	DCD
		38	CTS	38	CTS
		37	DSR	37	DSR
		36	RI	36	RI
		35	TXD	35	TXD
		34	RXD	34	RXD
		33	RTS	33	RTS

Operating Conditions	Symbol	Limits	Units
Supply Voltage (-5V Version)	VDD	+ 4.75 to + 5.25	VDC
Supply Voltage (-3V Version)	VDD	+ 3.20 to + 3.40	VDC
Operating temperature	TA	-20° to + 70°	°C
Extended temperature			

Power Requirements	Typical Current (mA)	Max. Current (mA)
XM8200S Wi-Fi active (Tx @ 16dbm)	260	280
Average Idle	125	150
Power save mode	8	9

Product Documentation	Doc Nr.
Designers Guide	XM8200S-E00-100
AT Command Manual	XM8200S-A00-100
Additional Documentation	www.xmodus.ch

Contact Information	
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