RS485 over RF Module - Technical Specifications

GENERAL		
Part Number	SEPS-WT-XBEE	
Description	Stand-alone RF modems provide reliable wireless connectivity over a range of up to 28 miles.[*]	
PERFORMANCE		**UNIT**
Indoor/Urban range	10 Kbps: up to 2000 ft. (610 m); 200 Kbps: up to 1000 ft. (305 m)	ft./m
Outdoor/RF line-of-sight range	10 Kbps: up to 9 miles (15.5 km); 200 Kbps: up to 4 miles (6.5 km); (with 2.1 dBi dipole antenna)	miles/ km
Transmit power output	Up to 24 dBm (250 mW) software selectable	dBm
Throughput data rate	10 Kbps: up to 8.8 Kbps; 200 Kbps: up to 105.5 Kbps; (when configured as point-to-multipoint)	Kbps
RF data rate	10 Kbps or 200 Kbps	Kbps
Interface data rate	125-65,0000 bps (software selectable, includes non-standard baud rates)	bps
Receiver sensitivity	10 Kbps: -110 dBm; 200 Kbps: -101 dBm	dBm

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[*] Range figure estimates are based on free-air terrain with limited sources of interference. Actual range will vary based on transmitting power, orientation of transmitter and receiver, height of transmitting antenna, height of receiving antenna, weather conditions, interference sources in the area, and terrain between receiver and transmitter, including indoor and outdoor structures such as walls, trees, buildings, hills, and mountains

NETWORK AND SECURITY		UNIT
Frequency	902-928 MHz (located in the 900 MHz ISM Band)	MHz
Spread spectrum	Frequency hopping	
Supported network topologies	Mesh, Point-to-point, Point-to-multipoint, Peer-to-peer	
Channel capacity	8 hop sequences share 25 channels, 64 channels available	
ANTENNA		
Connector	RPSMA (Reverse polarity SMA)	
POWER REQUIREMENTS		
Power supply	7-30	VDC
Receive current	60 (@9V)	mA
Transmit current	140 (@9V)	mA
PHYSICAL PROPERTIES		
Size	4.5 in x 2.75 in x 1.125 in (11.4 cm x 7 cm x 2.9 cm)	in/cm
Weight	5.25 oz. (150 g)	oz/g
Data connection	RS-232 female DB-9, RS-485/422 screw terminal, USB Type B, Config USB mini-B, 10/100 Ethernet	
Operating temperature	-40°C to +85°C (Industrial)	°C
REGULATORY APPROVALS		
FCC PART 15.247 (U.S.A), IC (CANADA), C-TICK (AUSTRALIA), ROHS		