// RTO-20

Wireless Range Extender





For more information, contact: sales@episensor.com

visit http://episensor.com or call +353 61 512 500

Gateway Wireless Infrastructure Secure Connectivity Scale to thousands of sites and meters...

// Introduction

EpiSensor's RTO-20 can extend wireless coverage of an EpiSensor system by up to 300m, with quick and easy installation by plugging into any mains power outlet. It includes a high-quality, worldwide certified USB power supply with interchangeable pins for UK, EU, USA and AUS.

// Key Features

- Security from edge to cloud
- 128-bit AES data encryption
- Incl. USB mains power supply (with interchangeable pins for UK, EU, USA, AUS)
- Up to 32 'child' nodes
- Self-healing mesh network
- 2.4GHz ISM band ZigBee® wireless radio
- Over-the-air software upgrade capability
- Remotely monitor Link quality and RSSI





Technical Specification

// Power

Category	Parameter	Value
USB Mains Power Supply	Input Voltage Range	90 - 264 V AC
	Input Frequency Range	50 / 60 Hz
	Max Output Power	Max. 5 W
	MTBF	50K hours

// Communications

Category	Parameter	Value
Wireless Sensor Network	Radio Technology	ZigBee Pro
	Radio Frequency	2.4 GHz ISM band
	Network Topology	Mesh
	Channels	16 (802.15.4 Channels 11 to 26)
	Max Tx Power	+8dBm / +20dBm (with power amp)
	Tx modulation	O-QPSK
	Rx Sensitivity	-106dBm
	Max Data Rate	256kbit/s
	Wireless Range	up to 50m indoor / 300m outdoor

// Software & Security

Category	Parameter	Value
Time Sync	Synchronisation	NTP time server via Gateway
	Timestamp Resolution	1 second
Security	Sensor Network Encryption	AES 128-bit
	Server Communications	TLS v1.2 / various



Technical Specification

// Operating Conditions

Category	Parameter	Value
Operating Conditions	Operating Temperature	0°C to 55°C
	Storage Temperature	-20°C to 80°C
	Operating Humidity Range	10% to 90% (non-condensing)
Physical	Weight	0.2 kg
	Dimensions (W x H x D)	55 x 100 x 43mm (excl. AC pins)

// Certifications

Category	Parameter	Value
Certifications	Safety	CE, TUV-GS, C-Tick, cUL
	Environmental	RoHS, WEEE
	EMC/RF	Contains FCC ID: S4GEM35XB
		Contains IC ID: 8735A-EM35XB

EpiSensor products are not suitable or specifically designed, manufactured or licensed for use in military, aviation, powerplant, medical or in other inherently dangerous or safety critical applications.





Technical Specification

// Order Codes

SKU	Description
RTO-20	High gain, omnidirectional, incl. international USB mains power supply

Installation & Safety Notes



HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH



- → EpiSensor equipment should be installed, operated, serviced and maintained only by qualified personnel. EpiSensor does not assume any responsibility for any consequences arising out of the use of this equipment.
- For detailed installation and safety information, consult the Install Sheet.

// Contact

For technical support, please contact support@episensor.com or phone +353 61 512 500

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Manufactured in an ISO 9001 / ISO 14001 certified facility.

Designed and manufactured in Ireland





