# SMN-800/900 SmartNODE<sup>TM</sup> RFID Receiver

**User Guide** 





#### Federal Communications Commission (FCC) Statement

#### 15.21

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

#### 15.105(b)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

- -Increase the separation between the equipment and receiver.
- -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -Consult the dealer or an experienced radio/TV technician for help.

Operation is subject to the following two conditions:

1) this device may not cause interference and

2) this device must accept any interference, including interference that may cause undesired operation of the device.

#### FCC RF Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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### Introduction

The SMN-800/900 SmartNODE<sup>TM</sup> RFID Receiver is an integral component of the SmartSense Wireless Vital Signs and Location Tracking System. The system is designed for wireless and automated measurement and recording of patient vital signs and for location tracking of patients and high-value assets.



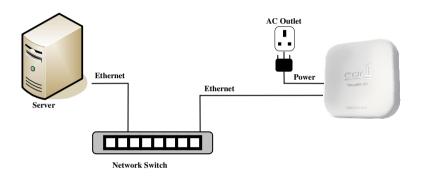
The SMN-800/900 SmartNODE<sup>TM</sup> RFID Receiver is a LAN-enabled receiver for receiving data transmitted by the SmartSense<sup>TM</sup> series of wireless sensors and monitors. The receiver uploads data received from the sensors to the SmartSense<sup>TM</sup> database via its built in Ethernet LAN interface.

In a typical installation, the receivers are to be installed at strategic locations in the hospital in a manner to meet the specific coverage requirement of the application. The receivers being Ethernet LAN capable lend themselves well to deployment using standard Ethernet LAN equipment and infrastructure.



## **Typical System Setup**

The following diagram shows how SMN-800/900 is deployed in a typical SmartSense System configuration.





# Specifications

TECH	NICAL DATA		
Interfaces			
	Ethernet LAN	10 Base-T	
RF			
	RF Frequency	US (SMN-9xx): 919.8MHz or 925M Europe (SMN-8xx): 868.4MHz	1Hz
	Input connector	US (SMN-9xx): RP-SMA Europe (SMN-8xx): SMA	
	Input impedance	50ohm	
Power			
	Power source	5-6VDC	
	Current consumption	250mA (typical)	
Enviro	nment		
	Operating temperature range	$10 - 50^{\circ}$ C	
Physica	ıl		
	Dimension	140 x 140 x 35mm	
	Weight	300g	
Compli	ance		
-	Certification	CE, FCC	
	RF Compliance	ETSI EN 300 220	
	EMC Compliance	ETSI EN 301 489	