



Avertch RFID Monitoring & Wander Management

Avertch is an active RFID monitoring and wander management system designed to provide senior living retirement communities and memory care facilities an intelligent, integration-friendly, and virtually interference-free solution for preventing residents with dementia from wandering away from a building or designated area.



Intelligent Design

A microprocessor-based system, Avertch utilizes advanced electronics and 418.5 MHz carrier wireless Radio Frequency Identification (RFID) technology to fully identify residents, determine their access and egress rights, and communicate alerts digitally, audibly, and remotely, if desired. Avertch enables communities to manage residents' egress based on their individual cognitive ability rather than forcing them to accept a one-size-fits-all configuration. The system's efficient design incorporates the controller, keypad and LCD display into one compact unit. Utilizing a proprietary digital protocol, Avertch resident tag transmitters produce best-in-class accuracy and reliability. Our tags also include a long-life three-year, factory-replaceable battery, providing significant savings over competitors' shorter-life and disposable tags.

Integration-Friendly Platform

Avertch's integration-friendly platform is designed to help communities gain efficiencies by eliminating duplicate hardware and streamlining communications. The system can be seamlessly integrated with a wide variety of electromagnetic locks, access control systems, and other security and communication devices, enabling shared monitoring and reporting over the Avertch network. In addition, the data communications output terminal included in the Avertch Central Notification Station can be utilized to interface with a variety of alarm notification technologies, including popular alphanumeric pocket paging systems.

Virtually Interference-Free Communication

Unlike analog-based wander management systems, Avertch utilizes digital RFID to navigate signals around radio frequency interference (RFI) and obstructions, offering the Senior Living industry a virtually interference-free solution. Analog signaling has been in use for decades and is generally less expensive than digital technology. However, the problem with analog, which includes AM and FM formats, is its susceptibility to RFI. In Senior Living Communities, RFI can be produced by a host of commonly-used electrical devices, including air handlers, fluorescent lights, telephone systems, local area networks, Wi-Fi, fire panels, and many other current and future technologies. It's the natural attributes of digital pulsing which makes digital communication ideal for wandering patient systems requiring high signal quality and consistent performance. In fact, Avertch's 16-bit pulsing format is so reliable that the probability of interference is a only .0000000000000001%.

Benefits:

- Advanced electronics offers communities the flexibility they need to provide personalized access and egress rights.
- Efficient design incorporates the controller key pad and LCD display into one compact unit.
- Integration-friendly platform helps communities gain efficiencies by eliminating duplicate hardware and streamlining communications.
- Virtually interference-free, reliable communication ensures resident safety is never compromised.
- Long life, three year, replaceable batteries provide savings over competitors shorter life and disposable tags.

System Components

Door Controller Unit

Door Controller Unit constantly monitors a specific door's area for the presence of a resident wearing a Tag Transmitter. When a Tag is detected, the **Door Controller Unit** will arm itself, display and communicate the identity of the Tag, and, if intended, activate electromagnetic door locks.

Door Locking Unit

Door Locking Unit is a basic door locking control with no radio-detection capability, designed for controlling pedestrian traffic at low usage doors, such as stairwell doors, fire exits, courtyard gates, and other locations which require security.

Resident Transmitter Tag

Resident Transmitter Tags are detected by a **Door Controller Unit**, enabling the Avertch system to control and lock doors, if required. These active RFID Tags have factory-replaceable batteries, and include a warranted three-year battery life. Tags are waterproof and designed to be worn on a resident's wrist or ankle.

Central Notification Station

The **Central Notification Station** monitors and displays the status of all **Door Controller Units** and **Door Locking Units**.

Wireless Testing Module

The hand-held **Wireless Testing Module** enhances the operation and efficiency of the Avertch system by providing a portable, wireless, and secure means for testing Resident Tag battery and communications status.

SPECIFICATIONS:		
Door Controller Unit	Part Number	SG-DCU-V8
	Package Contents	Door controller unit, antenna, and flush mount or surface mount frame
	Power	12 volts DC linear or switching
	Frequency	418.5 MHz
	Coverage	2 to 25 feet
	Indicators	DC power, door status, resident transmitter detection LED; 4-line backlit LCD screen
	Interfaces	DPDT double pole double throw lock relay; alarm single pole double throw relay; alarm detect single pole double throw relay; programmable auxiliary output single pole double throw relay; auxiliary dry contact input (normally open/normally closed)
	Operating Temperature	32 to 120 degrees
Warranty	3 year limited	
Door Locking Unit	Part Number	SG-DLU
	Package Contents	Door locking unit
	Power	12 volts DC linear or switching
	Indicators	DC power, door status, resident transmitter detection LED; 4-line backlit LCD screen
	Interfaces	DPDT double pole double throw lock relay; alarm single pole double throw relay; alarm detect single pole double throw relay; programmable auxiliary output single pole double throw relay; auxiliary dry contact input (normally open/normally closed)
	Operating Temperature	32 to 120 degrees
Warranty	3 year limited	
Resident Transmitter Tag	Part Number	FF-RTT
	Frequency	418.5 MHz
	Protocol	Amplitude Switch Key (ASK) modulated
	Battery Life	3 year warranted
	Dimensions	1.27" x 1.57"; 0.655" total thickness
	Weight	0.8 ounces
	Waterproof or resistant	Waterproof
	Regulatory	Manufactured to FCC Part 15 specifications
Warranty	3 year limited	
Central Notification Station	Part Number	SG-NSU
	Power	12 volts DC linear or switching
	Communications	RS485, 3 wire
	Indicators	4-line backlit LCD screen
	Warranty	3 year limited
Wireless Testing Module	Part Number	SG-STT
	Power	2 AA batteries
	Frequency	418.5 MHz
	Coverage	6 to 24 inches
	Indicators	2 line LCD screen
	Interfaces	Single button operation
	Warranty	3 year limited