Farpointe Data®
Readers • Credentials
A DORMA Group Company

FREQUENTLY ASKED QUESTIONS
RANGER® LONG-RANGE WIRELESS RADIO RECEIVERS AND TRANSMITTERS

Q: What applications are ideal for the Ranger Receivers and Transmitters?
A: Ranger can serve many applications due to its high frequency and multi-functionality. Ranger is perfect for long-range access control applications such as gates, barriers and duress applications. It is great for any application where pressing a button is more convenient than presenting a credential, but can also be encoded with any standard Wiegand format to function as a standard presentation-style access control credential. It's like having two products in one!

Q: How easy is it to use and operate?
A: Very. The push buttons allow the user to activate the fob from their pocket or purse rather than having to dig out a credential. With the addition of another access control technology such as proximity or smart cards, it can integrate seamlessly into the end user's operation. And the battery, while easily changeable, only operates the push buttons. If it dies the fob can still be read as a traditional credential by presenting it to the reader.

Q: What is the read range?
A: Ranger is one of the most versatile access control solutions available. The Ranger Receiver is based on the globally harmonized 433-MHz frequency and does not require line-of-site. It can be read from water or land. The maximum range of Ranger is 200 feet, but unlike other long-range products, it is fully adjustable by rotating the read-range dial on the receiver board. This allows the installer to customize the read range if it is too long for a particular location and they are picking up more than one transmitter.

Q: What are the options for configuring the buttons?
A: Ranger Transmitters are available in either a two- or four-button configuration, with each corresponding to its own Wiegand output on the Ranger Receiver. Each transmitter includes an integrated LED to indicate both positive button press and battery strength. Each button on the transmitter can be customized to correspond to a specific function (or two or more to the same function). For example, button one is the parking garage. Button two is the front door. Button three is shipping and receiving and button 4 is the server room. The buttons can be used as a remote door opener for visitors, panic alarms and almost any application the user can think of. A two-button fob is available for those that don't need all four options. In addition, the buttons can be reconfigured, so if you only want to use two buttons now you can configure the other two at a later date.

Q: Can Ranger be encoded with any standard access control technology?
A: Yes! The Ranger is universal and supports 26-bit and custom Wiegand formats in both long-range and proximity portions. Transmitters can be equipped with a potted proximity or contactless smart card module, allowing the transmitter to be used as a close-range, presentation-style credential. It is the only product like this that works with the majority of access control technologies on the market. They can be ordered custom with a proximity module, interoperable with certain HID® or AWID® 125-kHz proximity protocols, or a contactless smart card module (MIFARE 1K or 4K) compatible with Delta multi-technology contactless smart card readers.

Q: What is the cost of ownership?
A: It is very, very low because the Ranger uses low power and only one battery. Ranger Transmitters are powered by a replaceable CR2032 lithium battery, the most common lithium battery on the market. This high-energy, low-cost button cell has been tested to exceed 250,000 button presses and is available off-the-shelf at local stores. The Ranger is the best value in a long range RFID solution for access control, parking and other secure-entry applications.

Q: What makes the Ranger product unique?
A: The Ranger series is a brilliantly simple solution that allows the user to carry two different transmitter types in one by putting both technologies in a single, convenient fob-style package. The transmitters are the same size as the one for your car and can be put on a standard key ring.

(continued on reverse)

Farpointe Data®
Readers • Credentials
A DORMA Group Company

FREQUENTLY ASKED QUESTIONS
RANGER® LONG-RANGE WIRELESS RADIO RECEIVERS & TRANSMITTERS

Q: How easy is it to install?
A: Ranger features a number of LEDs and audio tones, including for read range. This allows a single technician to easily calibrate the read range of the unit. The receiver will tell you if you are enrolled or not with an "invalid code" tone. Wiegand output means it installs just like a standard proximity reader. It can be installed indoors or outdoors and comes in an IP-66 rated enclosure. The Ranger Receiver includes a drill template for mounting provisions to US or European wall boxes, as well as pre-drilled holes in the four comers, allowing installation to a flat surface. Utilizing the Button Select Jumper, the receiver can be configured to receive data from Buttons 1 and 2, or from Buttons 3 and 4.

Q: How robust is the Ranger?
A: Transmitter electronics are protected in an IP-67 rated water- and weather-resistant enclosure that snaps together securely without screws. Ranger Transmitters are manufactured with hard plastic buttons with raised numbering that will resist wearing, cracking and jamming. The receiver is housed in a weather resistant enclosure built to endure the most challenging natural environments and withstand temperatures from -13F to 122F (-25C to 50C). The receiver is tightly sealed with a weather-resistant gasket to allow installation both indoors and out.

Q: What is the failure rate of these products?
A: All Farpointe products have a very low rate of failure, and in the case of the Ranger line, it is almost non-existent. Old, noisy electricity supply? No problem. Heated wind-screen interfering with read range? No problem. Line-of-site not possible? No problem. The product comes with a standard one-year warranty.

Q: How secure is the communication channel?
A: Ranger takes advantage of a secure, digital anti-playback routine, based on a custom rolling code variant of the Tiny Encryption Algorithm (TEA). The anti-playback feature virtually eliminates the risk of code sniffing and unauthorized duplication. Every time a button is pressed the encrypted rolling code changes, preventing a "sniffed" code from being re-transmitted.

Q: Can this product be privately labeled?
A: Absolutely! Like all Farpointe products, the Ranger line can be labeled with the Integrator's or OEM's name and contact information. This helps the end-user know who to call for problems (or more business) and also makes it difficult for the competition to take over your account.

Q: Does the Ranger product require any licenses?
A: The Ranger product operates at 433 MHz. At that frequency, no licenses are required anywhere in the world. Ranger can meet your needs without licensing hurdles wherever you need to sell and install it. No retuning, additional daughter boards or stock is required to meet each region—just one product, one stock, delivers everything you need, globally.

Q: Can it read through walls and other building materials?
A: The receiver's PCB trace antenna offers omni-directional coverage, allowing for it to be installed out-of-sight and collect transmissions through building materials. It can read through walls, making it ideal for indoor parking applications as well as outdoor.

P/N: 01680-001 · Rev. 12.15

DORMA

Farpointe Data, Inc.
1376 Borregas Avenue
Sunnyvale, CA 94089-1004 USA
Office: +1-408-731-8700
Fax: +1-408-731-8705
support@farpointedata.com

www.farpointedata.com