



# Farpointe Data SRD001 SRD Mobile-Ready Contactless Smartcard Reader User Guide

[Home](#) » [Farpointe Data](#) » Farpointe Data SRD001 SRD Mobile-Ready Contactless Smartcard Reader User Guide



## Contents

- [1 QUICK START GUIDE](#)
- [2 Introduction](#)
- [3 Cable Requirements](#)
- [4 Reader Wiring](#)
- [5 Output Formats](#)
- [6 Grounding](#)
- [7 Power](#)
- [8 Voltage and Current](#)
- [9 Read Mode](#)
- [10 Connection](#)
- [11 Troubleshooting](#)
- [12 Documents / Resources](#)
- [13 Related Posts](#)

## QUICK START GUIDE

### SRD™.MOBILE-READY CONTACTLESS SMARTCARD READER AND KEYPAD WITH OSDP SUPPORT

This Quick Start Guide is intended for experienced installing technicians. It is a basic reference to ensure all connections are properly made. For additional information please reference Farpointe Data's website, [www.farpointedata.com](http://www.farpointedata.com).

## Introduction

A key component of a physical security electronic access control system, a mobile-ready reader combining BLE and contactless smartcard technologies is based on RFID technology. In operation, it is capable of reading data stored on a contactless smartcard credential via high frequency—or reading data from mobile credential stored in a smartphone's wallet app via BLE technology—and without physical contact, and then passing the data obtained to the physical access control system. Access control systems typically manage and record the movement of individuals through a protected area, such as a locked door.

## Mounting Provisions

The reader may be installed either indoors or outdoors and is capable of a single-gang wall-switch box mount (on plastic or metal). Use supplied #6 mounting screws, or equivalent security screws, for installation.

## Cable Requirements

Cable, 4 conductors, 22 or 24 AWG [65 mm or 51 mm] twisted pair, overall shield, and UL approved (Belden 8273, or equivalent). Maximum RS-485 bus length: 4,000 ft – 24 AWG (1,219 m)

## Reader Wiring

### OSDP

Twisted Pair	Conductor	Function
Pair 1	Red	DC (8-14 VDC)
	Black	Ground
Pair 2	Green	RS-485 Tx+/Rx+
	White	RS-485 Tx-/Rx-

## Output Formats

The SIA standard OSDP protocol is supported for clear and secure channel communication.

Default Address: 0

Default Baud rate: 9600bps (bits per second)

Default Secure Channel Key:

SCBK\_D = 0x303132333435363738393A3B3C3D3E3F.

OSDP Protocol Technical Support:

SIA OSDP Application Profile: Basic Reader (OSDP v2.2 and higher)

## Grounding

Shield (drain) continuity must run from the reader to the access panel. Shield (drain) and reader ground must be tied together at the access panel and connected to earth ground at one point.

## Power

The reader may be powered by the access panel. A linear power supply is recommended for the best operation.

## Voltage and Current

Voltage: 8 to 14 VDC

Current Draw: 60mA typical, 250mA peak

## Read Mode

Reader (OSDP “PD”) operation is controlled by the access panel (OSDP “ACU”) per the OSDP specification.

## Connection

The connection must be done in accordance with NFPA 70. Do not connect to a receptacle controlled by a switch. Connect to a power-limited DC voltage source.

## Troubleshooting

1. When the reader is first powered on it will beep 4-times and the LED will shine red.
2. Presenting a supported access credential will result in the reader beeping and the LED flashing once.
3. Mobile operation is optimized for smartphones supporting BLE (Bluetooth LE) version 4.2 or newer. Further, for the downloading of mobile access credentials, a stable, high-quality internet connection is recommended.
4. OSDP communications with the panel will be established after the reader has completed its start-up sequence. The panel can query the reader for status using OSDP commands. Note, at this point, the access panel controls the reader beeper and LED functionality.

If the reader does not recognize the card or tag (no beep, no LEDflash), refer to possible OSDP communications errors detected at the access control panel. Please see the table on the reverse side for additional possible causes and solutions.

### SRD™MOBILE-READY CONTACTLESS SMARTCARD READER AND KEYPAD WITH OSDP SUPPORT

Possible Cause	Corrective Action
OSDP misconfiguration, not configured for OSDP, secure channel mismatch	Confirm panel is configured for OSDP. Confirm panel and reader are both configured for Secure Channel (or both unencrypted.) Confirm PD address and speed.
Incorrect cabling	Verify gauge, connections, and cabling length
Not enough power	12 VDC recommended
Incorrect credential used	Verify if credential technology is supported
Reader/access panel not properly grounded	Earth ground needed—verify shield and reader ground are tied at access panel and connect to the ground at one point
Supply generating interference	Linear power supply recommended, verify switching power supply before use

Should any of the corrective actions mentioned above not improve performance, disconnect the reader from the access panel and power it with a separate power supply or 9VDC battery, and re-test card functionality, with an OSDP panel simulator if necessary. By powering the readers separately, most variables that may lead to reduced performance can be eliminated. OSDP issues often require a packet trace, which the installer or panel vendor

should be prepared to provide if there are problems. Should the problem persist, please contact Farpointe directly?

**Operating Temperature:** -31° F to +150° F (-35° C to +66° C)

**Operating Humidity:** 0% to 90% Relative Humidity

**IP Rating:** IP67

**Access Control Performance Levels Conforming to UL STD 294:**

Destructive Attack	Line Security	Endurance	Standby Power
Level II	Level I	Level IV	Level I

**Grade Classification Certified to CAN/ULC STD 60839-11-1:**

Risk Level	Application	Skill/ Knowledge of Attackers	Typical Examples
Grade 2	Grade 2	Grade 2	Grade 2

Many Farpointe Data Readers carry the following certifications:



FCC Compliance Statement: This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Caution: Changes or modifications not expressly approved by Farpointe Data could void the user's authority to operate the equipment. The product can be used without license conditions or restrictions in all European Union countries, including Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Spain, Sweden, United Kingdom, as well as other non-EU countries, including Iceland, Norway, and Switzerland. This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science, and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions: (1) This device may not cause interference. (2) This device must accept any interference, including interference that may cause undesired operation of the device.

**Note:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**For proper PIN security with keypad readers, please review our PIN Best Practices Reference Document.**



<http://www.farpointedata.com>

Farpointe Data reserves the right to change specifications without notice.

Nov-3-2021

© 2021 Farpointe Data, Inc. All rights reserved. Farpointe Data®, PyramidSeries Proximity®, Delta®, Ranger®, and CONEKT® are the registered U.S. trademarks of Farpointe Data, Inc. All other trademarks are the property of

their respective owners.

[www.farpointedata.com](http://www.farpointedata.com)

**Farpointe Data, Inc.**

2195 Zanker Road

San Jose, CA 95131 USA


Office: +1-408-731-8700

Fax: +1-408-731-8705

[support@farpointedata.com](mailto:support@farpointedata.com)

P/N: 01659-115 · Rev. 1

## Documents / Resources

	<p><a href="#">Farpointe Data SRD001 SRD Mobile-Ready Contactless Smartcard Reader</a> [pdf] User Guide</p> <p>SRD001, T8I-SRD001, T8ISRD001, SRD001 SRD Mobile-Ready Contactless Smartcard Reader, SRD Mobile-Ready Contactless Smartcard Reader, Smartcard Reader</p>
---	---

[Manuals+](#)