

8 Place du Commerce, suite 100,
Brossard QC Canada J4W 3H2
<http://www.coencorp.com>
<mailto:info@coencorp.com>



Tel: 1-450-672-4222
Toll free (US & Canada):
1-866-COENCORP
Fax: 1-450-672-6038

FleetZone Data Collector

Installation Guide

Created on: 5/29/2009 9:59 AM
Created by: Serge Kopikov
Document revision: 1.12

Copyright

This document cannot be redistributed to third party, reproduced or modified without written permission from Coencorp.

Disclaimer

The information in this document is subject to change without notice. While the information contained herein is assumed to be accurate, Coencorp assumes no responsibility for any errors or omissions.

Table of contents

1	Introduction	5
2	Specifications	6
3	Installing Data Collector.....	7
4	Connecting Data Collector to a SiteController	10

The North American versions of RF devices included in this manual contain the board having the following agency approval numbers:

US/FCC ID	VY3-VDUL5NA
CAN/IC ID	7522A-VDUL5NA

Warning: 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.

Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
Coencorp is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment.

The devices included in this manual were tested with the following antennae:

Device	Antenna P/N (Coencorp)
FGD-00582-02 (North American ver.)	MOD-00797 with RPSMA (internally mounted RF antenna)
FGD-00582-03 (European ver.)	

Warning: Any antenna not explicitly specified in this manual must be tested to comply with FCC section 15.203 for unique antenna connectors and section 15.249 for emissions.

1 Introduction

Coencorp RF Data Collector is an RF modem used in Coencorp Fleet and Fuel Management System to collect data from Vehicle Data Units (VDU) and to assist in the automated fueling sequence.

The RF communication between Data Collector and VDU uses 915 MHz (North American) or 868 MHz (European) frequency bands. The VDU only sends data in response to requests from Data Collector. The communication has a typical range of 300-600 ft (100-200 m) from the Data Collector.

The fixed Data Collector is mounted in a standard sealed electrical enclosure suitable for outdoor use. Besides the standard fixed Data Collector there exists a portable version having the same hardware and software but packaged in a smaller VDU-like enclosure. The portable version of data collector may be used for VDU installation tests with a laptop (see the VDU manual for details). This manual only covers the fixed Data Collector.

The Data Collector communicates with host computer through RS-232 serial port or USB (using USB-to-Serial adapter).

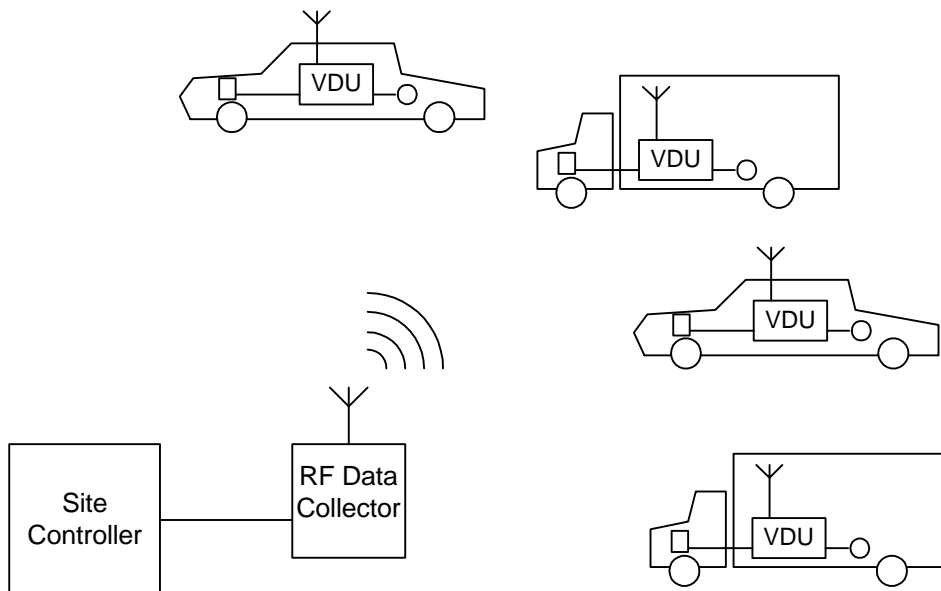


Figure 1. DataZone Site structure

2 Specifications

Parameter	FGD-00582-02 (North American version)	FGD-00582-03 (European version)
Electrical		
RS-232 baud rate	9600,19200,38400	
DC supply voltage	9..25 V	
DC supply current, max	30 mA	
RF		
Radio type	Fixed frequency	
Frequency band	910.0..920.0 MHz	868 MHz
Channels	11	1
Channel spacing	1.0 MHz	—
Range (typical)	100..200 m (300..600 ft)	
Antenna connector	RP-SMA	
Antenna	MOD-00797	
Mechanical & Environmental		
Storage temperature	-50..+85 °C	
Operating temperature	-20..+55 °C	
Dimensions	229 mm x 229 mm x 127 mm (9.0” x 9.0” x 5.0”)	
Interface connector	Screw terminal block	

3 Installing Data Collector

A fixed Data Collector connects to a SiteController computer through RS-232 port and does not require special drivers to be installed on the computer. This section contains mechanical sketches and electrical wiring diagrams for the installation. The Data Collector is shipped without cables and connectors: the installer must provide a cable.

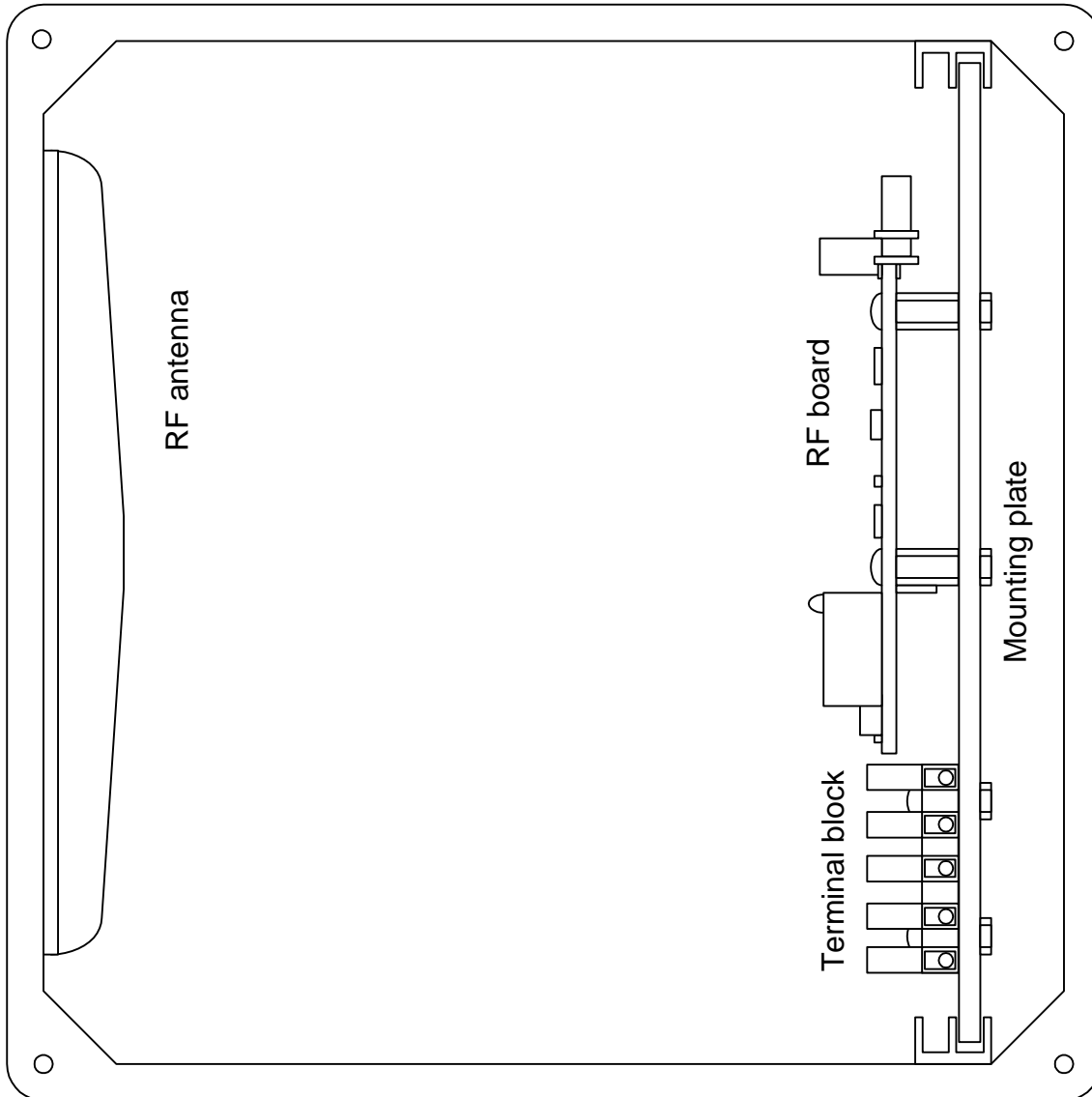


Figure 3. Data Collector – internal layout

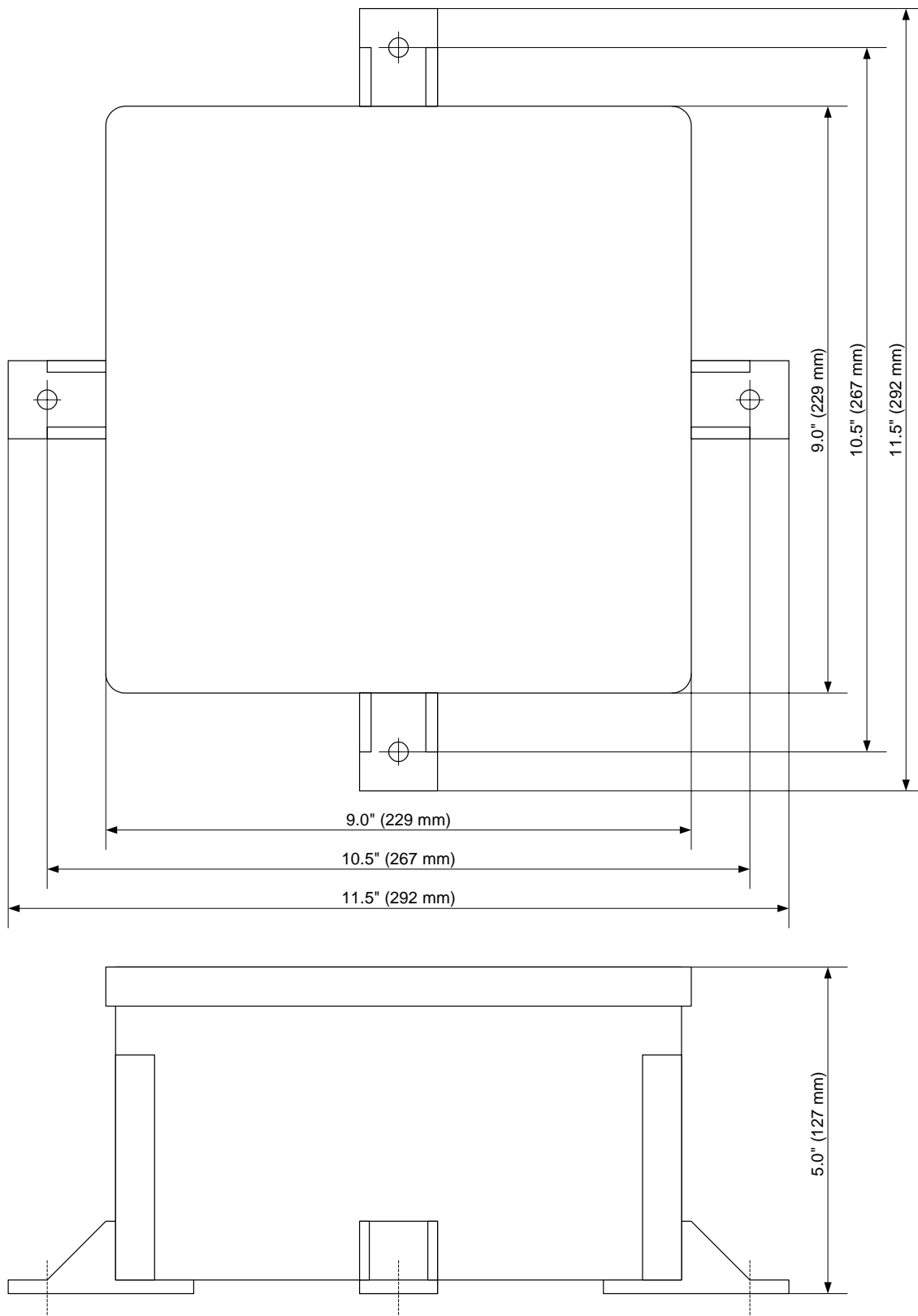


Figure 2. Data Collector – outside dimensions

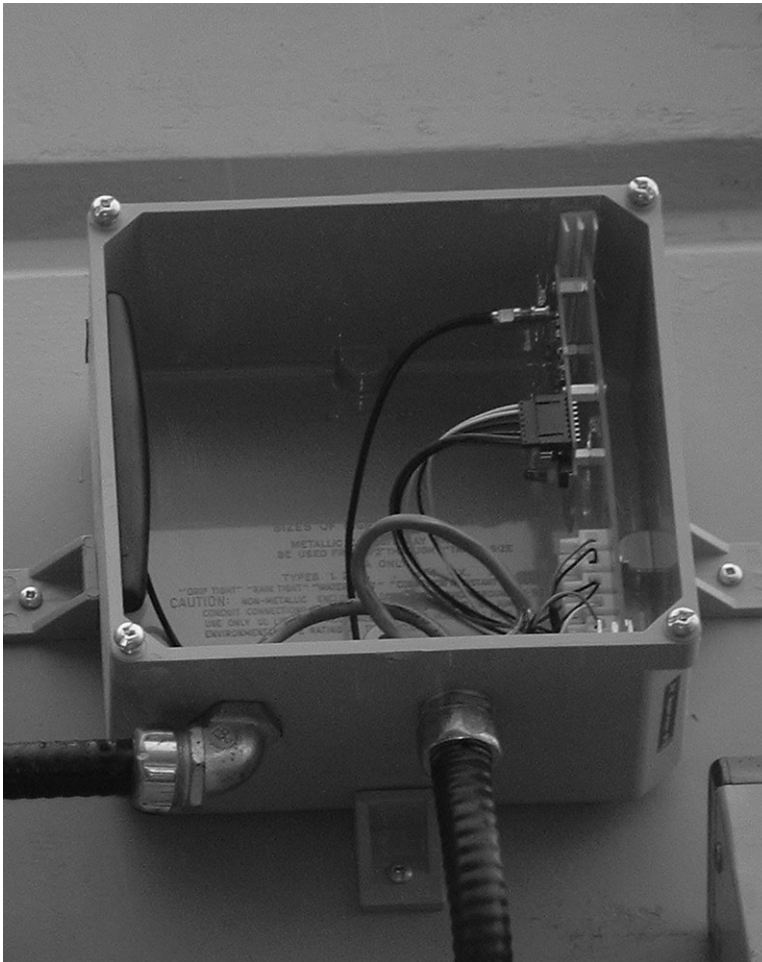


Figure 4. Data Collector mounted on a wall (cover removed)

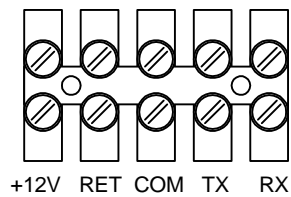


Figure 5. Data Collector – terminal block

4 Connecting Data Collector to a SiteController

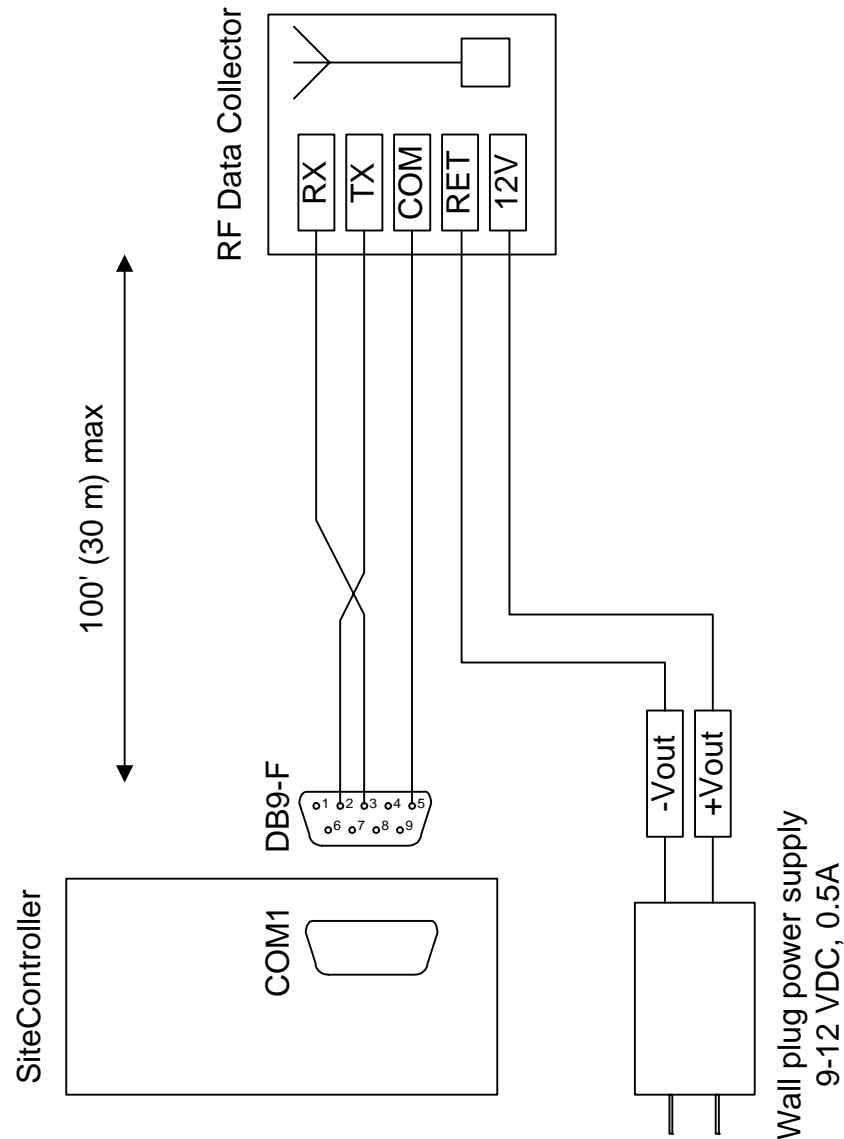


Figure 6. Data Collector connection to a SiteController through RS-232

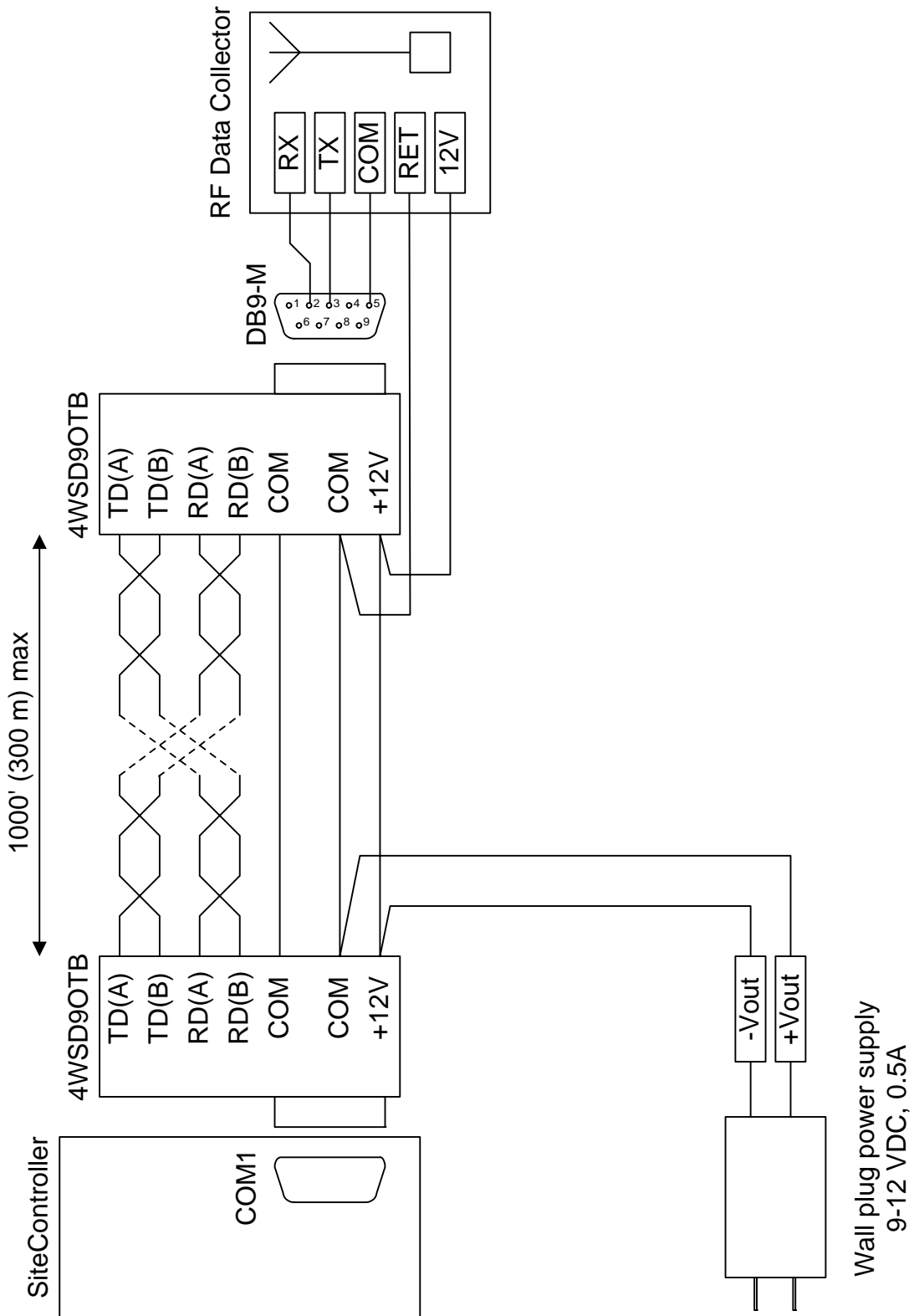


Figure 7. Data Collector connection to a SiteController through RS-422 (extended cable run).