

DRAFT

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Reader Hardware

The STF1000G is a multi-protocol, multi-regional Radio Frequency Identification (RFID) System that operates in the 860 – 960 MHz UHF band.

Mechanical Installation

Mounting the Reader

The STF1000G is equipped with a mounting plate with keyholes that accept three mounting screws. Pre-drill any mounting surface according to the following dimensions. Any mounting surface must be able to support up to four pounds.

Connecting the Ethernet Port

The maximum Ethernet cable length is 30 meters. If you are communicating with your reader across a Local Area Network (LAN), connect an Ethernet cable from your hub or router to the RJ-45 connection. See Figure for location of the connector. If you are connecting the reader directly to a PC, you must use a crossover cable. See Note to the left.

Connecting the USB Port

Connect a USB cable to the host pc for a direct connection to the STF1000G RFID reader.

Connecting the Antennas

The maximum antenna cable length is 10 meters. Connect the antenna to antenna port 1. If you are using additional antennas connect them to Ports 2-4.

Connecting the Power

Connect the power supply to the reader and connect the power supply to your 100-240 Vac, 50-60 Hz power source. Allow 30 seconds for the reader to initialize.

Architecture of system

The reader must be controlled from a host computer. iVOS will be loaded on the host computer for communication and control of the STF1000G UHF reader.

Software

IVOS-

- Status

- Setup of the reader

 - Set antenna

 - Set polled

 - Set timed reads

- Testing of the reader

 - Read tags

- API for the reader

Specifications

Reader Specifications

Frequency 860-960 MHz

RF Power 10 mW – 2W conducted

Connections USB, Ethernet LAN, and WiFi 802.11 (optional)

Input Voltage 12 to 24 Vdc, 60W

Input Current 1.7A maximum at 24 Vdc

- 1.7A maximum at 12 Vdc

Environmental Specifications

Operating Temperature -4°F to 131 F
Storage Temperature -4 F to 135F
Maximum Shock 1 foot (0.3 meter) drop to any corner
Relative Humidity 5% to 95% non-condensing
Case Material Sheet Metal
Case Dimensions 10.4, 4.75, 1.5

Power Supply Specifications

Input Voltage 100 – 240 Vac
Input Consumption 60W maximum
Input Frequency 50 – 60 Hz
Output Voltage 15 VDC
Output Current 4A maximum

Ethernet LAN Specifications

Connector Ethernet Indicators Signals RJ-45 10/100 BaseT Yellow - Indicates link is operational Green - Indicates network traffic detected. Pin 1 – TXD+ (Transmit Data +) Pin 2 – TXD- (Transmit Data -) Pin 3 – RXD+ (Receive Data +) Pin 4 – NC Pin 5 – NC Pin 6 – RXD- (Receive Data -) Pin 7 – NC Pin 8 – NC

Frequency (FCC) 860 – 960 MHz
Polarization Circular
Gain 7 dBi \pm 1 dBi, max
VSWR, maximum 1.3:1 or less
Axial ratio 1 dB or less
Input impedance 50 Ohm (nominal)
Power Handling 10 W

Safety Instructions

Power Disconnect Device

The plug on the power supply cord is intended to be the power disconnect device. As a result, the power source (socket or outlet) shall be located near the equipment and shall be easily accessible.

Regulatory Compliance

Caution: STF1000G is designed to meet the regulatory requirements in those jurisdictions in which it is offered.