

SPECIFICATIONS

Site Vantage

Model Number	SV1396
Frequency Range	132-960MHz
Maximum Number of Monitored Channels	80
Maximum Number of TX Antennas	3
Available RX RSSI Level Monitoring Ports	3
Rx Monitoring Port Input Range	-125 to -50 dBm
Channel Measurement Bandwidths	6.25, 12.5, 20 and 25 kHz
Power Supply Options	12-60VDC or optional 90-264VAC plug-pack
Mounting	1RU 19" rack mounting
Operational Temperature Range	-22 ° F to 140 ° F / -30 ° C to +60 ° C
RF Connector Type	4.3-10(F) TX FWD and REV ports BNC(F) RX and all other RF ports
Compliance	FCC Part15 IEC 61000.6.1, IEC 610006.33, IEC/EN 62368-1 AS/NZS 62368.1:2022, AS/NZS CISPR32, RoHS

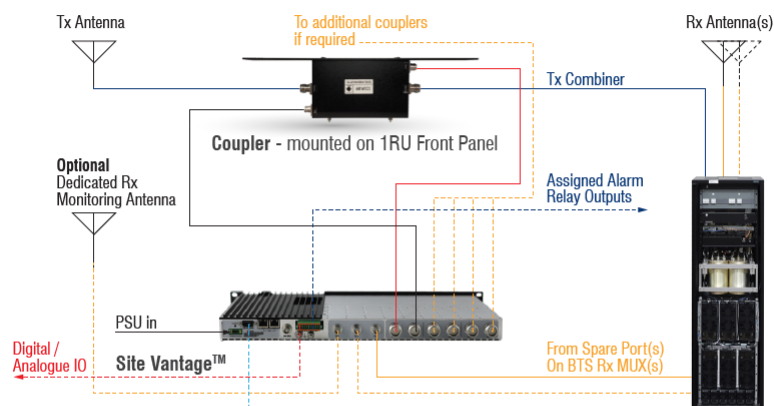
SPxxxx-y440-zzFF1RU

Model Number - xxxx	1318	3855	7496
Frequency range	130-180 MHz	380-550 MHz	746-960 MHz

Insertion Loss	<0.05dB
Input and Output Port Return Loss	>20 dB
Coupling Loss	40 dB (±0.7 dB)
Maximum Input Power	750 W
Mounting	1RU 19" rack mounting
Operational Temperature Range	-22 ° F to 140 ° F / -30 ° C to +60 ° C
Connector Type	4.3-10(F) or 7/16 DIN input and output ports N(F) coupling ports

Typical Connection Diagram

Site Vantage + Antenna Line Coupler



Optional SAM(s)



Site Vantage - SV1396

Quick Start Guide

INTRODUCTION

RFI Site Vantage provides channel specific forward and reflected Transmitted Power monitoring, transmit to receive Antenna Isolation measurement and Receive RSSI levels for up to 80 channels. Three paired forward and reflected power measurement inputs facilitate monitoring via high power Antenna Line Couplers. The low loss coupler is inserted after the Tx combiner on the antenna feeder cable. Furthermore, three receive ports enable monitoring of receive signals on three separate antennas catering for diversity systems and the optional independent monitoring antenna. All frequencies, channel bandwidths and level thresholds are software definable. A special rear connector provides onboard digital, voltage and temperature sensor inputs as well as logic and alarm relay outputs. A DB9 rear mounted connector can be used to serial connect optional SAM (Site Alarm Modules) modules for more inputs and outputs when required. Configuration, diagnostics and communication management is facilitated through the use of an advanced webserver Graphical User Interface (GUI).

SITE VANTAGE INSTALLATION

Mounting

Site Vantage is to be mounted indoors only. It is designed to fit in a 1RU rack space and should be mounted clear of any equipment that generates excess heat. Do not mount the unit inside small unventilated enclosures. Continuous operation above the specified maximum temperature may lead to premature failure of the Site Vantage.

DC Power

Power the unit from any convenient external supply that can provide the appropriate voltage and current . The DC power input is reverse polarity protected.

AC Power

The optional AC plug pack is supplied with a two way Phoenix plug. The plug pack should be mounted safely in a convenient location and clear of any equipment or obstructions which may cause it to overheat.

I/O Interface

A special rear connector provides 4 x Inputs (Digital, Voltage and Temperature Sensor Inputs) as well as 4 x Alarm / Logic Relay Outputs. The mating connector is also supplied with Site Vantage.

SAM Interface

A 9 way sub-miniature D connector is provided to connect the optional Site Alarm Module (SAM) to Site Vantage.

Earthing

Compliance with international electrical safety standards requires that the external Protective Earthing point on this equipment, as indicated by this symbol, be permanently hardwired to the premises protective earth system using 1.5 mm² (14 AWG) minimum cross-sectional area conductor. This connection provides protection from hazardous and transient voltages.

FORWARD RF Inputs 1 to 3

Connect these to the couplers' FWD outputs via user supplied 4.3-10(M) to N (M) coaxial cables. Used to measure forward RF power from the transmit combiner to the antenna.

REVERSE RF Inputs 1 to 3

Connect these to the Couplers' RFL outputs via user supplied 4.3-10(M) to N (M) coaxial cables. Used to measure RF power reflected back from the antenna.

RECEIVE RF Inputs 1 to 3

Connect these to main, diversity and independent monitoring Rx antennas or to existing Rx Multicouplers (RX MUXs). Used to measure channel specific Rx RSSI levels and Tx to Rx antenna isolation.

Ethernet Connectors

Three Ethernet ports are provided on Site Vantage, one at the front and two at the back of the unit. Each Ethernet port has a unique configurable IP address. Any of these ports can be used for alarm and configuration access utilizing the on board web server which provides web browser access to the GUI. However, the front port is generally used for on-site access whereas the two rear ports are purposed for permanent network connection.

COUPLER INSTALLATION

Mounting

The coupler is to be mounted indoors only. It is designed to fit in a 1RU rack space. Up to three couplers may be connected to each Site Vantage and they should be mounted in a position that allows for the required cables to be installed simply and with minimal cable stress.

FROM COMBINER Input

This port on the coupler should be connected to the transmit combiner system via an appropriate user supplied coaxial cable terminated with a 4.3-10 (M) connector.

TO ANTENNA Output

This port on the Coupler should be connected to the antenna system via an appropriate user supplied coaxial cable terminated with a 4.3-10 (M) connector.

FWD Output

This port on the coupler should be connected to one of the Site Vantage's FORWARD RF Inputs via user supplied N (M) to 4.3-10 (M) coaxial cables.

RFL Output

This port on the coupler should be connected to the Site Vantage's REVERSE RF Input corresponding to the FORWARD RF Input used above, again via user supplied N (M) to 4.3-10 (M) coaxial cables.

OPERATION

Green Power LED

This LED is illuminated when external power DC is present. If the green LED is not on then either there is no DC voltage present or the polarity is incorrect.

Red Alarm LED

This LED is a summary alarm LED indicator and is illuminated when there are internal system, RF or site alarms present.

Ethernet Connection Set-up

Access to the Site Vantage GUI interface via the on board web server requires an Ethernet connection to a laptop/PC running a web browser. The GUI can be accessed directly via a short Ethernet cable to a local PC or remotely via a TCP/IP network. To begin a session, start your web browser and type the Site Vantage factory default IP address (<http://192.168.1.200> for the front Ethernet port) into the address field of your browser. A successful connection is indicated by the display of the Site Vantage log in screen. If the IP address is not known, the Site Vantage will need to be reset to factory default settings using the rear panel reset button.

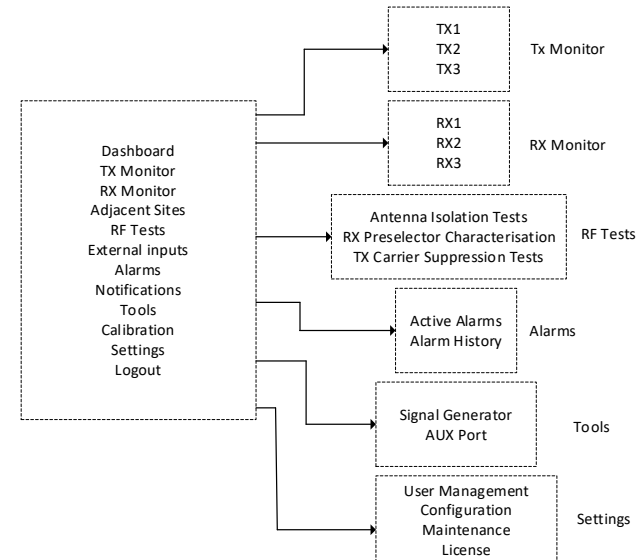
Graphical User Interface (GUI)

Prior to use, the Site Vantage must be configured to suit the installation. The GUI interface provides access to both status monitoring and settings screens. The GUI menu tree is shown below.

Transmitter channels need to be configured for frequency, bandwidth and forward / reverse power alarm thresholds. The isolation measurement channel and receiver channels requiring RSSI monitoring are also configured and alarmed via the GUI. A number of other Site Vantage parameters may also need to be set depending upon your installation. For full details on GUI and Site Vantage programming, please refer to the User's Manual .

Operating Precautions

- There is no On/Off switch on the unit - it becomes active as soon as DC power is connected or the AC plug pack is switched on at the AC outlet.
- Do not operate the unit outside the specified operating temperature range.
- Do not open the unit as there are no user serviceable parts inside. All faulty equipment should be returned to the supplier for repair.



User's Manual

For more detailed information on the hardware installation and software commands see the User Manual. Please download the User Manual from www.rfi.com.au

Firmware Version

Site Vantage is manufactured with the latest version firmware available at the time of manufacturing. Please visit www.rfi.com.au to check the latest available firmware version and upgrade the unit if necessary. Upgrade procedure is described in the User Manual.

Optional Feature Licenses

Some of the advance features are optional and require a license key to be activated. Please refer to the Specifications Sheet for a list of available optional licenses. Please contact RFI to purchase licenses. Activation procedure is described in the User Manual.

Help

For help on using this product contact your nearest RFI Sales Office or visit www.rfi.com.au

Operations in the United States

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.

Responsible Party:

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