

TWO-PORT TAG READER RFID-READ2-350



Smart Tag two-port tag readers provide a communication range of up to 500 m (1640 ft) and support up to two antennas which provide separate scan zones and can indicate directionality. Tag readers can be used to reliably track the location and movement of tagged resources, including personnel, vehicles and goods for underground mines and tunnels. Data gathered by tag readers is sent to the Smart Tag Server, a central computer system which facilitates system control and monitoring.



RFID-READ2-350

Product Specifications

Part Number	RFID-READ2-350
Physical	
Enclosure	Fiberglass, NEMA 4x (IP66)
Dimensions (L x W x H)	343 x 290 x 170 mm (13.5 x 11.4 x 6.7 in)
Weight (nominal)	3.63 kg (8.0 lbs)
Connectors	2 SMA antenna ports, Ethernet port, power terminals
Environmental	
Temperature Range	-20 to +60° C (-4 to +140 °F)
Electrical	
Input Voltage	88-264 VAC
RF Characteristics	
Impedance	50 ohms
Frequency	920 MHz
Maximum transmit power	≤ 10 mW/+10 dBm
Data	
Identification Code	48 bit fixed ID
Performance	
Read/Write Range	Up to 250 m (820 ft)
Multiple tag handling	Up to 500 tags in the read zone
Tag read speed	Can scan 50 Tags at 50 km/h (31 mph)
Approvals	
Intrinsic Safety	No
CE Certification	Yes

Installation

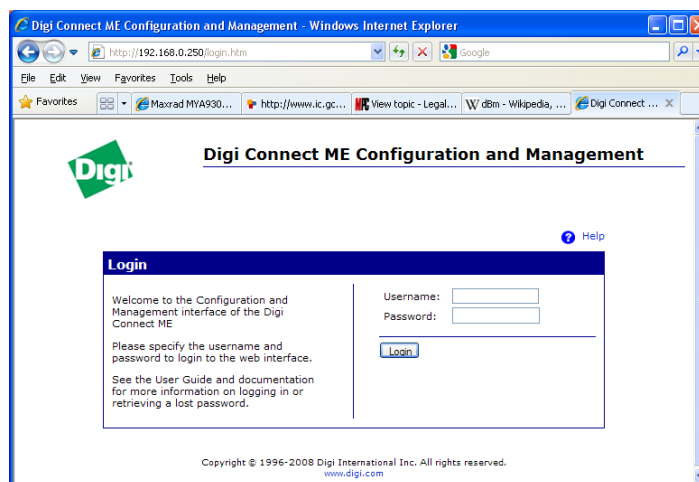
Use the following guidelines to ensure proper installation of Smart Tag readers:

- Before installation, tag reader locations need to be defined; whether the tagged objects are moving or stationary also needs to be determined.
- Tag readers should be mounted fairly close to the read location as lengthy antenna cables reduce the read range of the system. Varis offers connectorized LMR-400 cable in two lengths: 10 m/33 ft (AFC10NSMA) and 45 m/148 ft (AFC45NSMA).
- Read locations need to be sufficiently spaced since overlapping zones may provide misleading information about tag location and direction of movement.
- Ensure that 120/240 VAC and an Ethernet connection are available.
- Once the antenna locations have been selected, it's important to select the right type of antenna. Antennas have many different radiation patterns and usually combinations of antennas will be required to provide adequate coverage. See the Smart Tag manual for more information.
- Tag readers are shipped with a default transmit power of 0 dBm. This needs to be changed when tags are being activated or configured. In these cases, the transmit level should be set to -10 dBm to ensure that transmit power regulations for the United States and Canada are not exceeded. See the Smart Tag manual for more information.
- The tag reader IP address must be configured for the installation. Tag reader default settings are as follows:

IP Address:	192.168.0.250
Subnet Mask:	255.255.255.0
Default Gateway:	192.168.0.1
User Name:	root
Password:	dbps

Tag Reader Configuration

1. Connect to the tag reader web interface at the default IP (192.168.0.250).

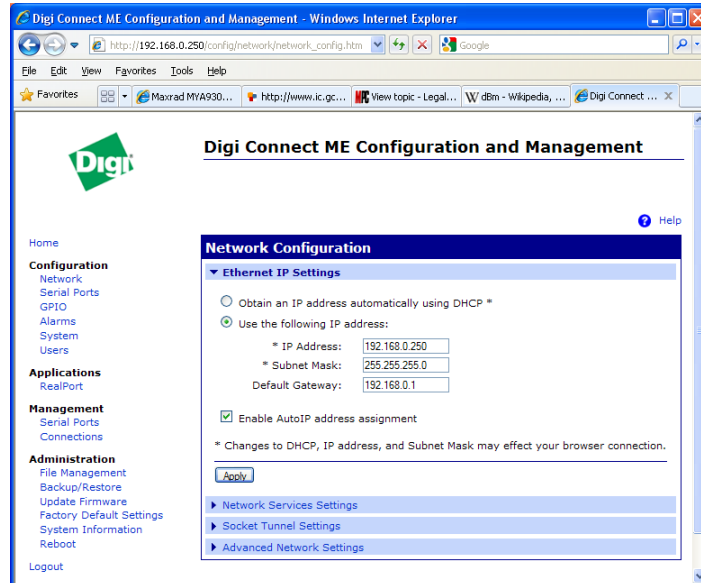


Tag Reader Login

2. Enter the username and password.

Username: root
Password: dbps

3. Click on *Network* from the *Configuration* menu. Enter new network settings and click *Apply*.

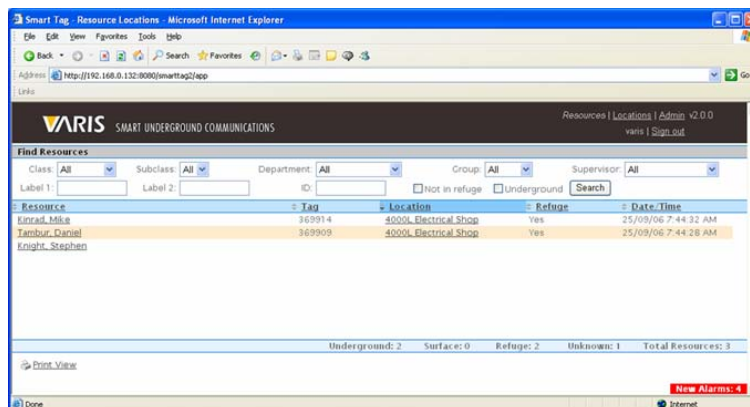


Tag Reader Configuration

Smart Tag Software

Smart Tag provides:

- Real-time resource location.
- Resource tracking with history.
- A straightforward Graphic User Interface (GUI).
- Multiple user access.
- Software and administration password protection.
- A software package that's easy to install, deploy and maintain.
- Numerous custom configuration options.
- See Smart Tag manual for more information.



Smart Tag Software