

Portal Communication: Portals send out a signal every minute to Sensorware which is forwarded to Surgere. This is to confirm that the portal is powered and connected to the network. The Surgere Team confirms that heartbeats have not been received and the portal is not communicating to Surgere. If the issue is not resolved by completing the *Surgere Sensorware Alert Troubleshooting* steps then the portal needs physically checked.

**See next page for definitions.*

CHECKING THE STACKLIGHT



1 The red light indicates the reader has power.



2 The green light indicates the reader has power and is attempting to read tags.



3 If the red stack light is off, or if there is no stack light, check the back of the reader:

3a Verify all connections are secure.

3b Check if the power light is on, located on top next to the Antennas. If this light is not on the reader does not have power.

CHECKING THE PoE CABLE

1 Check for faulty cable:

1a Connect the ethernet cable to a working reader and see if power is transferred.

1b If the working reader still receives power the ethernet cable is not the point of failure.

2 Check the PoE cable length:

2a Confirm the ethernet cable run from the PoE switch to the reader does not exceed 330 feet.

CHECKING THE PoE SWITCH

1 Check PoE switch-port:

- 1a Plug offline reader into a known working PoE switch-port.
- 1b If the offline reader receives power the readers original switch-port is the point of failure.
- 1c Client's internal network team must be consulted at this point

2 Check PoE switch-port power

- 2a Verify the switch supports the total PoE devices connected

Example switch command output:

```
Switch(config)# show power-over-ethernet brief
Status and Counters - Port Power Status
System Power Status      : No redundancy
PoE Power Status         : No redundancy
Available: 600 W Used: 9 W Remaining: 591 W

Module A Power
Available: 408 W Used: 9 W Remaining: 399 W

PoE  | Power  Power  Alloc Alloc  Actual
Port | Enable Priority By   Power Power
-----+-----
A1   | Yes    low    usage 17 W  0.0 W
A2   | Yes    low    usage 17 W  0.0 W
A3   | Yes    low    usage 17 W  0.0 W
A4   | Yes    low    usage 17 W  0.0 W
A5   | Yes    low    usage 17 W  0.0 W
A6   | Yes    low    usage 17 W  8.4 W
```

- 2b Verify the PoE switch-port the reader is connected to is configured to support the maximum current draw compliant with the PoE 802.3af standard, 15.4W*

**Impinj readers draw a maximum power of 11.5W. If the switch-port power level is too low the reader will begin rebooting or completely power down.*

DEFINITIONS

- **Portal** – tower(s) used to read RFID tags; typically set up at dock doors, conveyors, or choke points as a one or two tower configuration
- **Reader** – the unit within the tower which collects and forwards the RFID reads to Sensorware
- **Sensorware** – software used to communicate RFID reads to Surgere; resides on the server