



Wireless Monitoring System *by TempSys*

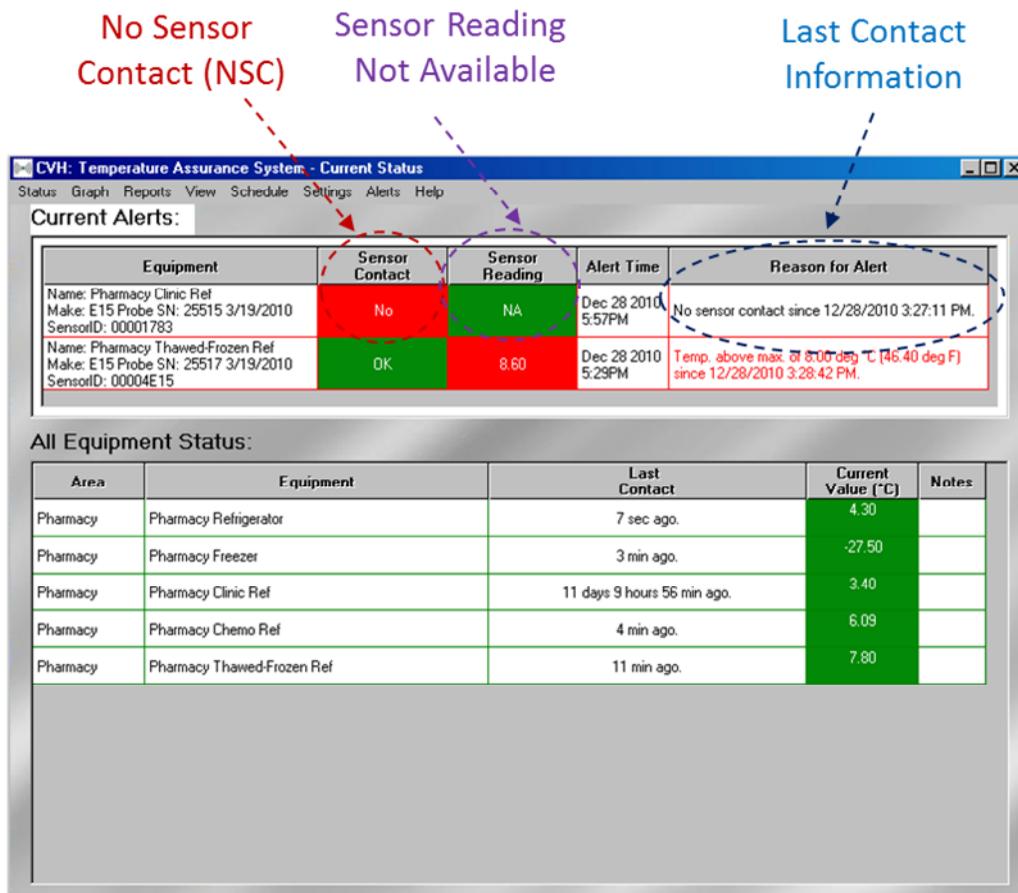
How To Troubleshoot and Resolve a No Sensor Contact (NSC) Condition (G2, G3 and G4 Systems)

Document No. D1501

Revised: January 3, 2011

1.0 Problem Description

A No Sensor Contact (“NSC”) condition has occurred when the CheckPoint system displays a red-colored “No” in the Sensor Contact column, as illustrated in the sample screenshot in Figure 1 below.



No Sensor Contact means the CheckPoint Sensor has not been able to communicate with an Access Point or Repeater to send its temperature data (or other measured parameter such as % humidity or % CO2) for over a minimum period of time (default = 2 hours).

Figure 1 - Sample No Sensor Contact Screen Shot

Although no data may be available for display since the beginning of the NSC condition, the Sensor does store the temperature (or other measured parameter) readings for up to 10 days (10 days for G3; up to 30 days for G4 sensors) in its on-board memory for automatic retrieval when the wireless connection is restored.

2.0 Possible Problem Root Causes

A NSC condition that occurs for an existing sensor that has otherwise been working properly and has not been subject to any system configuration changes may be the result of any of the following root causes:

1. Sensor batteries have drained
2. Communications between a sensor and a nearby Access Point (“AP”) or Repeater is no longer possible due to one or more of the following possible reasons:
 - a. The closest Access Point is disconnected from the network or has been powered off
 - b. The closest Repeater has been powered off and is not available
 - c. Signal strength between the sensor and AP or repeater has fallen below an acceptable threshold level and effective communications is no longer possible.

√ If ALL sensors are in a NSC state, displaying the same time of Last Contact, then the server maybe down. Contact your IT department to confirm network status.

√ If only a few sensors are in NSC state, then a Repeater or Access Point maybe down. Check Status\Wireless Network. The last contact for each repeater or AP must be within 2 hours.

3.0 Basic Resolution Steps

Prior to contacting CheckPoint Customer Support, please follow and perform the basic resolution steps outlined in Table 1 in sequential order. This sequence of resolution steps may eliminate and correct the basic issues that arise and result in a NSC condition.

4.0 Contacting TempSys for Further Assistance

If the Basic Resolution Steps have not successfully corrected the NSC condition, please contact CheckPoint Customer Support for further assistance:

1. **Customer Support Portal:** <http://checkpoint.kayako.com> – Submit a ticket
2. **E-Mail:** Send an e-mail message to support@tempsys.net and include the following information:
 - a. Your name and contact information (phone and e-mail address)
 - b. Name of your organization
 - c. Description of the problem
 - d. Best time to reach you
3. **Phone:** Call our Support Center Dispatching Center at (510) 526-7624

Table 1 - Basic NSC Resolution Steps

Step	Description	Resolution Steps	Notes & Comments
A	Sensor Batteries Drained	<ol style="list-style-type: none"> 1. Remove two sensor casing screws with a small Philips screw driver. 2. Gently pull down on the sensor base to gain access to the battery compartment and sensor circuit board (see Figure 2). 3. Remove each of the two AA lithium batteries and verify they still have adequate charge (or simply replace with two new batteries). 4. Re-insert the batteries and verify the green LED on the flip side of the circuit board blinks three times. 	<p>If there are other sensors in the area that are working properly, this indicates the problem is mostly likely a drained battery or an issue with the Sensor.</p> <p>Contact CheckPoint Support if replacement or resetting of the sensor does not correct the NSC condition.</p>
B	Access Point – Disconnected from Network	<p>If Step A above does not resolve the NSC issue, the AP may no longer be successfully connected to the network.</p> <ol style="list-style-type: none"> 1. Disconnect the Ethernet cable and DC power cord (if POE is not used) powering the AP. 2. Wait at least 10 seconds and plug the Ethernet cable and DC power cord (if POE is not used) back in to the AP. 	<p>Please contact your IT department and inquire whether the network is down and/or if there has been any recent changes to the network. Network outages and/or network reconfiguration may result in a disconnection of the AP from the network.</p>
C	Repeater Chain to Access Point Broken	<p>If Step B above does not resolve the NSC issue, the signal strength between the sensor and a nearby repeater may be too low.</p> <ol style="list-style-type: none"> 1. Disconnect the DC power cord that powers the repeater and wait at least 10 seconds. 	<p>A repeater may communicate with another repeater or directly with an AP.</p>
D	Insufficient Sensor Signal Strength	<p>If Step C above does not resolve the NSC issue, there may be other issues that have caused the NSC condition.</p> <p>Please contact CheckPoint Customer Support as detailed in Section 4.0 above.</p>	<p>Insufficient signal strength, or another root cause, may be the reason for the NSC condition.</p>

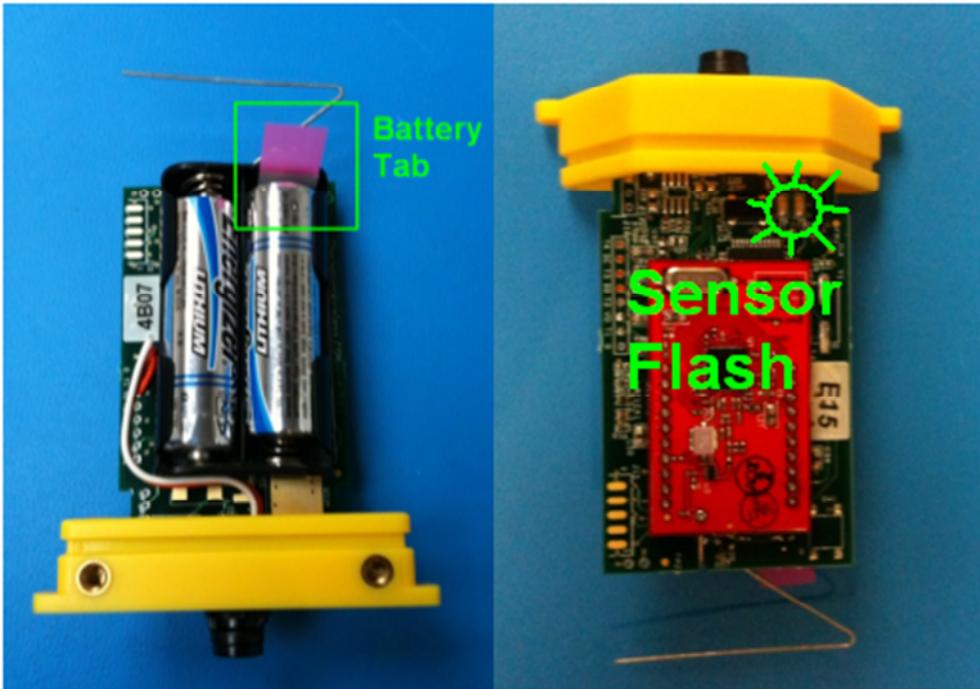


Figure 2 - Sensor Batteries & Circuit Board