

## Application Note: Assembly Line

**Product Range:**    **Wireless Equipment List (Per Freezer):**

- A1-01a Sensor Pod

Per wireless system:

- B1-06 Gateway

**Application:**        **Assembly Line Monitoring**

Being alerted to problems on an assembly line.

**Background:**

The manager of a labor-intensive assembly operation had a unique problem: being free to “roam” to address normal production issues, yet being “on-hand” on the assembly line whenever production slowed below 5 units per 5 minutes.

**The Problem:**

The manager needed to be informed when there was a decrease in production so he could then join the assembly line.

**The Solution:**



Grant Monitoring System can be used to provide value even in very simple operations, by delivering information remotely to the right people in a timely manner.



**Grant Instruments (Cambridge) Ltd**  
Shepreth, Cambridge, SG8 6GB, England  
Tel: +44(0) 1763 260 811, Fax: +44(0) 1763 262 410  
[www.grant.co.uk](http://www.grant.co.uk)

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A photocell was installed at the output end of the assembly line to provide a pulse every time an assembled unit was produced.

The photocell was connected to the digital counter input of the Grant A1-01a Sensor Pod.

The Grant online software was set at a sampling rate of 5 minutes. The alarm criteria was set to send an alarm if less than 5 counts were received in 5 minutes (the sample period).

If the count level dropped below 5, a text alert is sent to the pager carried by the on-duty manager within 90 seconds. The alarm alerts the manager to the fact that the line needs immediate attention regardless of the reason; parts shortages or assembly or worker problems.

In addition, to clear an alarm, the manager must enter the reason for the alarm, so the system keeps a historical record of what problems occurred. The numeric output rate can also be graphed and analyzed at any time.

While the solution was relatively simple, it fit the requirements perfectly.

**The Benefits:**

With the manager receiving alarm notification within 90 seconds of the production line slowing down, he is able to react to this alarm and have the line back up and running without too much down time.



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