



Case Details

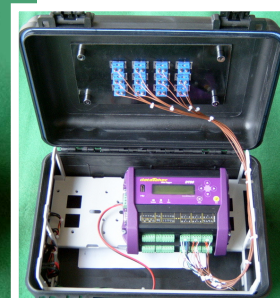
For quality purposes, a client needed to monitor the environment within a shipping container used during the exportation of paprika and various fruits. The critical elements to be monitored were the levels of Oxygen, CO2, Ethylene and temperature. If any of these factors were outside the acceptable limits during transport then the product quality was jeopardised. A rugged logging solution with a large memory capacity was required.

Key Requirements

- Portability
- Large memory capacity
- Battery operation
- Easy sensor connection

dataTaker DT80

- 1 A cost effective data logger expandable to 100 channels, 200 isolated or 300 single-ended analog inputs
- 2 Built-in web and FTP server allows for remote access to logged data, configuration and diagnostics
- 3 Modbus slave and master functionality allows connection to Modbus sensors and devices and to SCADA systems
- 4 Smart serial sensor channels capable of interfacing to RS232, RS485, RS422 and SDI-12 sensors
- 5 Rugged design and construction provides reliable operation under extreme conditions
- 6 Includes USB memory stick support for easy data and program transfer



dataTaker enclosure: The DT80 is safely mounted and powered from within the enclosure so as to mitigate risk of damage or tampering

dataTaker Solution

Equipment

- dataTaker DT80 data logger
- dataTaker Portable Enclosure

Sensors

- Oxygen sensor
- CO2 sensor
- Ethylene sensor
- Temperature sensors

Implementation Notes

The dataTaker DT80 was the perfect solution for the client given its size, the fact that the DT80 included an internal battery and its generous memory capacity for up to 10,000,000 recording points. Encosys, the dataTaker Korean distributor modified a dataTaker Portable Enclosure to ensure that the gas and temperature sensors would be easy to connect through the enclosure, whilst keeping the data logger safely sealed inside. A connector for an external DC power source was added to the enclosure so that the internal battery could be charged when necessary without opening the enclosure.

Custom temperature sensors were made so that the internal temperature of fruit could be monitored during transit.

On arrival, data was downloaded via a USB cable and analysed to ensure that the product remained within acceptable environmental limits during transportation.

In doing this, the importer could guarantee the quality of their goods during transport and continue to supply a premium product.