Q18 Data Loggers
...the heart of the profiling system

The Q18 data logger range has been designed using the latest miniaturized electronic packaging technology, enabling us to combine speed of readings, superb accuracy and high resolution all in one versatile unit. The Q18 is intended for use in short and medium duration thermal processes and can be supplied in a number of configurations with between 4 and 12 type K thermocouple input channels.

- Readings from up to 12 thermocouples at a faster speed, finer resolution and greater accuracy than ever before
- Process data is communicated to the PC in seconds using a direct USB connection
- Harsh environment radio telemetry system enables you to immediately see profile data, as the Datapaq® system passes through your process

The Q18 data logger from Datapaq has the power and flexibility to profile thermal processes found in a wide range of industrial applications.

DESIGNED WITH EASE OF USE IN MIND
The Q18 retains the familiar status indicators and start/stop buttons common to the complete Datapaq range of industrial temperature data loggers.

READY FOR USE AT ALL TIMES
The Q18 is equipped with an internal NiMH battery and intelligent fast charger circuits – these allow the user to leave the logger permanently on charge with no risk of damage to the battery.

FAST AND EFFICIENT
The fast sampling capability and huge memory for readings enables large amounts of data to be captured, this is transferred in seconds to a PC using a high speed USB interface ensuring minimal time is lost. Additionally the logger can be specified with a radio telemetry option.

RADIO TELEMETRY
The radio telemetry option enables you to immediately see the data appearing on a PC screen as the system passes through your process. When this option is specified, the Q18 is fitted with a 'built into the logger', harsh environment radio transmitter. The PC is equipped with a USB based receiver system, while the Datapaq Insight™ analysis software controls the configuration.

A Q18 FOR EVERY PROCESS
The Q18 is available in a wide selection of height and width options, each of which has range of thermal barriers. This ensures that you can choose the data logger based on the requirements of your process.

FLEXIBLE
The Q18 has the power and flexibility to profile many different industrial thermal processes from electronics packaging and assembly, through food preparation, paint and powder coating to metal heat treatment.
### TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>DATA LOGGER</th>
<th>PART NUMBER</th>
<th>HEIGHT</th>
<th>WIDTH</th>
<th>LENGTH</th>
<th>NUMBER OF CHANNELS</th>
<th>TELEMETRY SYSTEM OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>DQ1812</td>
<td></td>
<td>20 mm (0.7 in)</td>
<td>60 mm (2.3 in)</td>
<td>237 mm (9.3 in)</td>
<td>12</td>
<td>Q18 based temperature profiling systems can be specified with a radio telemetry option.</td>
</tr>
<tr>
<td>DQ1810</td>
<td></td>
<td>20 mm (0.7 in)</td>
<td>60 mm (2.3 in)</td>
<td>221 mm (8.7 in)</td>
<td>10</td>
<td>A custom designed, harsh environment transmitter is fitted inside the data logger and transmits the readings in real time back to a receiver connected via USB to a PC.</td>
</tr>
<tr>
<td>DQ1860</td>
<td></td>
<td>11.7 mm (0.4 in)</td>
<td>106 mm (4.1 in)</td>
<td>150 mm (5.9 in)</td>
<td>6</td>
<td>Does not support radio telemetry.</td>
</tr>
<tr>
<td>DQ1862</td>
<td></td>
<td>20 mm (0.7 in)</td>
<td>57 mm (2.2 in)</td>
<td>165 mm (6.4 in)</td>
<td>6</td>
<td>Does not support radio telemetry.</td>
</tr>
<tr>
<td>DQ1861</td>
<td></td>
<td>11.7 mm (0.4 in)</td>
<td>60 mm (2.3 in)</td>
<td>301 mm (11.8 in)</td>
<td>6</td>
<td>Does not support radio telemetry.</td>
</tr>
<tr>
<td>DQ1863</td>
<td></td>
<td>11.7 mm (0.4 in)</td>
<td>131 mm (5.2 in)</td>
<td>111 mm (4.4 in)</td>
<td>6</td>
<td>Does not support radio telemetry.</td>
</tr>
<tr>
<td>DQ1800</td>
<td></td>
<td>11.7 mm (0.4 in)</td>
<td>106 mm (4.1 in)</td>
<td>150 mm (5.9 in)</td>
<td>6</td>
<td>Does not support radio telemetry.</td>
</tr>
<tr>
<td>DQ1840</td>
<td></td>
<td>9 mm (0.35 in)</td>
<td>85 mm (3.3 in)</td>
<td>210 mm (8.3 in)</td>
<td>4</td>
<td>This logger can be fitted with TM21 to provide radio telemetry functionality.</td>
</tr>
<tr>
<td>DQ1850</td>
<td></td>
<td>11.7 mm (0.4 in)</td>
<td>85 mm (3.3 in)</td>
<td>215 mm (8.5 in)</td>
<td>10</td>
<td>This logger can be fitted with TM21 to provide radio telemetry functionality.</td>
</tr>
</tbody>
</table>

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### Sampling Interval
0.05 seconds to 10 minutes

### Accuracy
±0.5°C (1.0°F)

### Resolution
0.1°C (0.2°F)

### Maximum Internal Operating Temperature
85°C (185°F)

### Temperature Range
-150°C to 1370°C (-238°F to 2498°F)

### Memory
55,000 readings per channel (6 channels active)

### Data Collection Start
Start/Stop buttons, time or temperature trigger

### Battery
NiMH rechargeable

### Thermocouples
Type K

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**Worldwide Service**
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