Introduction

The T24-BC1 is a battery charger and power supply suitable for the T24 range of 3V devices. The T24 Battery Charger is designed to supply a constant 3.3 V from a Li-ion Battery while also charging the battery from an input voltage.

The unit comes pre-configured to provide a charging current of 466mA suitable for VARTA LIP653450. This module also supports additional batteries providing a charge current of 133 mA via the removal of the leaded resistor (non surface mount).

Please note batteries are not included.

Specification at a Glance

- Lithium battery telemetry charger modules for use with T24 acquisition modules
- Provides 3.3 V regulated output
- Same footprint as T24 acquisition modules
- Charges from 5 VDC supply (ideal for USB)
- Dimensions 37.5 x 16.8 mm

User Benefits

- Allows T24 system to be powered by rechargeable batteries
- Li Ion batteries allow power from 5 V supplies

Ideal Application

- Civil Engineering
- Construction
- Automotive
- Lifting & Weighing
- OEM
**Case Study**

**The Application:**
Highway agencies and bridge owners spend large revenues protecting bridge users by visual inspection of bridge elements such as bolt joints and tensile steel ropes.

Obtaining multiple readings to monitoring the entire structure can be costly and labour intensive.

**The Solution:**
A single bridge can be fitted with low power telemetry acquisition devices at every joint to monitor the strain in bolts and fixings, thus indicating where the bridges' weak points are and when they need servicing. A PC based on the bridge would allow the wireless data to be logged and then remotely accessed over the Internet as well as being able to alert engineers by email to any critical repairs required.

Fitting the bridge with, for example, 12 acquisition devices would allow the T24-HA Advanced Wireless Handheld to be used on-site to view the values of the 12 devices and their instantaneous values. Owing to the low power requirements of the T24-SA strain gauge acquisition modules, a simple solar panel power supply can be used to trickle-charge the batteries via the T24-BC1 battery charger contained within each unit.

**CE & Environmental**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage temperature</td>
<td>-40 to +85°C</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-40 to +85°C</td>
</tr>
<tr>
<td>Relative humidity</td>
<td>95% maximum non condensing</td>
</tr>
</tbody>
</table>

**CE Environmental Approvals**

- Low Voltage Directive 2006/95/EC