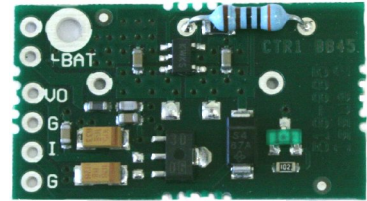


New Generation Telemetry 2.4GHz Battery Charger

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 3.3V 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 133mA via the removal of the leaded resistor (non surface mount).



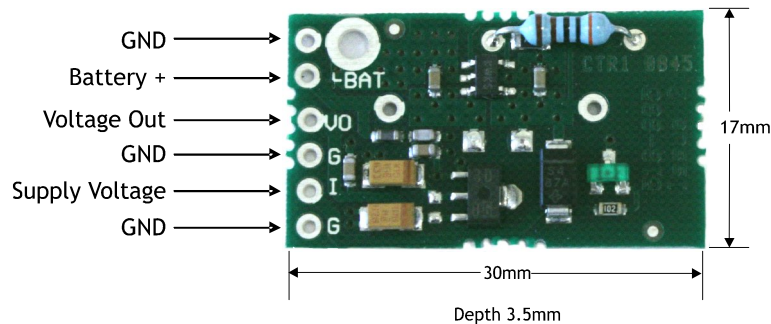
Specification

Parameter	Min	Typ	Max	Units
Supply Voltage	4.1	5	6	V
Regulated Voltage Output	-	3.3	-	V
Battery positive connection	-	3.7	-	V
Maximum Cable Length	-	-	150 *	mm
Dormant PCB Current	-	1.7	-	µA

* 07/02 gauge wire attached to maximum load i.e. T24-SA with four 350 Ohm strain gauges

Note LED will only be lit when an input voltage is applied

Physical Connections and Dimensions

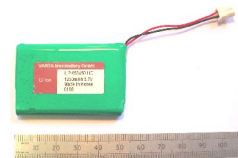


PCB Dimensions: 17 x 30 x 3.5 (height) mm

Battery Options

VARTA LIP653450

- Rated Capacity: 1100mAh
- Dimensions: 35 x 54 x 7 (mm)
- Weight: 20g
- Charge Time : 3 Hours @ 466mA
- Battery life with SAi & e = 1 month 25 days*



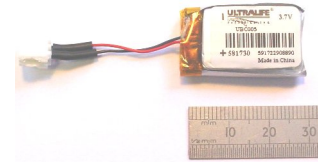
VARTA LIC18650

- Rated Capacity: 2200mAh
- Dimensions: 18.25 Diameter 65mm Height
- Weight: 46g
- Charge Time : 4.5 Hours @ 466mA
- Battery life = 3 months 20 days*



UBC 581730

- Rated Capacity: 250mAh
- Dimensions: 18 x 31.5 x 5.8 (mm)
- Weight: 6.5g
- Charge Time : 2 Hours @ 133mA
- Battery life = 7 days*



- Note: Battery life is calculated with a T24-SA running in low power mode with a sample time of 5mS and transmit interval of 333mS for 2 hours out of every 8 hours, to a 1kΩ bridge

Product Codes

T24-SAi	Strain Gauge Acquisition Module internal antenna	T24-HS	Handheld Reader Simple
T24-SAE	Strain Gauge Acquisition Module with socket for external	T24-HA	Handheld Reader Advanced
T24-VAi	Voltage Acquisition Module internal antenna	T24-BSu	Base Station USB
T24-VAe	Voltage Acquisition Module with socket for external antenna	T24-BSi	Base Station Industrial
T24-IAi	Current Acquisition Module internal antenna	T24-SO	Serial Output
T24-IAe	Current Acquisition Module with socket for external antenna	T24-BC1	Battery Charger
T24-SAFi	'Fast' Strain Gauge Acquisition Module internal antenna		
T24-SAFe	'Fast' Strain Gauge Acquisition Module with socket for external antenna		



Approvals



, Complies with EMC directive. 2004/108/EC

The Radio Equipment and Telecommunications Terminal Equipment (R&TTE) Directive, 1999/5/EC.



Industry Canada Industrie Canada

In the interests of continued product development, Mantracourt Electronics Limited reserves the right to alter product specifications without prior notice