Stick-type Battery

Article no.: DZ-PCKO-06097-8/x

For a long life cycle:

Recommendation

Charge the stick-type battery only in the ITC or with the specially designed battery charger.

- Never charge the stick-type battery with a third-party battery charger.

Fig. 1: Side view of the stick-type battery

Technical data

Nominal voltage	14.6 V
Minimum capacity	2750 mAh
Nominal energy	40 Wh
Cell	Samsung INR18650-29E
Number of cells	4
ADS-TEC article no.	DZ-PCKO-06097-8/x

Admissible operating temperature range (temperature of the cells):

Charging	0 … +43 °C
Discharging	-17 … +58 °C

Charging procedure:

Charging voltage	16.4 V
Charging current	0.5 C*

Charging time:
(with charging station or ITC)

One battery inserted	2.5 h
Two batteries inserted	4 h

Operating time of the ITC with two fully charged batteries:

Mobile Mark 2012	7 h 50 min
Full-load operation	3 h 30 min

* C rate = Capacity of the battery in Ampere, here 1 C = 2.75 A

Full cycles under laboratory conditions
1 test cycle = CCCV** charging with 0.5 C and 0.05 C cut-off current and discharging with 1 C and 10 V cut-off voltage.
The cycles are in a stretch. Afterwards, the following applies: after 500 cycles, 70% of the nominal capacity is still available.
**CCCV = Constant Current Constant Voltage

Storage: Temperature range (cell temperature) for long-term storage	up to 1 month	-18 … 60 °C
	up to 3 months	-18 … 45 °C
	up to 1 year	-18 … 25 °C (recommended)

The following applies for the temperature range -18 … 25 °C:
Ageing over time: If the temperature range for storage is respected, with an initial SOC*** = 50% and after the time has elapsed, at least 80% of the nominal capacity are still available. Lower storage temperatures will slow down the ageing process.
Storage in a shut-down ITC (Zero Power Mode active) with 2 inserted batteries with each approx. 30% SOC: After approx. 16 days 0% SOC will be reached.
Storage of the battery removed from the ITC with 30% SOC: At the earliest after 300 days of storage, 0% SOC will be reached.

Recommendation
For storing the battery in an optimum way: At the beginning of storage, the battery should have a SOC of 30 … 50%.

Check the SOC on a regular basis. At the latest when the red LED of the charge state indicator starts to blink, the battery must be recharged.
***SOC = State of Charge

Stick-type Battery

Article no.: DZ-PCKO-06097-8/x

The stick-type battery has a charge state indicator. Press the push-button “Test”. The LEDs will indicate the current charge state.

Fig. 2: Charge state indicator

LED display	Charge state
Red LED blinks	0 … 10% SOC
Red LED on	11 … 32% SOC
Red and orange LEDs on	33 … 65% SOC
Red, yellow and orange LEDs on	66 … 94% SOC
Red, yellow, orange and green LEDs on	95 … 100% SOC

Further accessories

External battery charger for 2 batteries

Facilitates concurrent charging of two batteries

- Control the charging process comfortably via two-color LEDs
- Suitable for table and wall-mounting
- External power supply (mains adapter) not included in the scope of delivery

Article no.: DV-ITCOPT-002 001-AA

Fig. 3: External battery charger with two batteries

Stick-type Battery

Article no.: DZ-PCKO-06097-8/x

External power supply Input: 100-240 VAC, 50-60 Hz. Output: 20 VDC, 70 W. • Dimensions (w x h x d) 132 x 60 x 32 mm • Suitable as replacement or additional mains adapter for the device and the charging station. Article no.: DV-ITCOPT-004 001-AA	 Fig. 4: External power supply
External car power supply Suitable as additional adapter for mobile use of the device and the charging station. • Input: 11-15 VDC, Output: 20VDC, 90W • Includes plug for cigarette lighter Article no.: DV-ITCOPT-005 001-AA	 Fig. 5: External car power supply
Replacement battery • Suitable as replacement or additional battery • Control of the state of charge directly at the battery • Replacement of a battery possible whilst in operation • Capacity: 40 Wh Article no.: DV-ITCOPT-003 001-AA	 Fig. 6: Side view of the stick-type battery