ANALYT MESSTECHNIK



TECHNICAL NOTE

SKC AirChek TOUCH Lithium-Ion Battery Packs

Characteristics, charging, storage and shipping of the rechargeable lithium-ion battery packs in the SKC AirChek TOUCH and other SKC sample pumps.

AMTC-TN-0006

About this note

The SKC AirChek TOUCH and several other SKC sample pumps run on a rechargeable lithium-ion (Li-Ion) battery pack. How long a pack lasts, both on one charge and over its life, depends on how it is charged, used and stored. This note sets out what is particular about Li-Ion packs, the charging and storage rules that keep them in good condition, and the rules for shipping them.

Lithium-ion battery packs (p. 5) covers the characteristics of the packs and which SKC instruments use them. Charging, storage and shipping (p. 6) gives the rules, with the details for the AirChek TOUCH.

The charging procedure, the battery icon and the replacement of the pack are described step by step in the *SKC AirChek TOUCH Sample Pump — Quick Start Guide* and the *SKC AirChek TOUCH Sample Pump — Operating Manual*.

How this note marks information

⚠ WARNING

A hazardous situation which, if not avoided, could result in death or serious injury.

NOTICE

Practices not related to personal injury — damage to the product, the process or the sample.

Note

Information that helps understanding; never a hazard.

Document information

Title	SKC AirChek TOUCH Lithium-Ion Battery Packs — Technical note
Document number	AMTC-TN-0006
Revision	Rev. 2 — October 2026
Applies to	Li-Ion battery packs of the SKC AirChek TOUCH sample pump, model 220-5000TC, and of the other SKC instruments listed in chapter 1
Language	English
Manufacturer	SKC Inc.

Revision history

Rev.	Date	Change
2	October 2026	Quality programme: new document type, number and identity pages.
1	October 2026	First issue.

This note is general information. It does not replace the applicable regulations, the operating instructions of your equipment, or legal advice, and it is not the final word on any legal or regulatory question, including the transport of dangerous goods.

SKC, AirChek, Pocket Pump, Leland Legacy, QuickTake and NoiseCHEK are trademarks of their owners. Information in this note is subject to change without notice. © 2026 ANALYT-MTC Messtechnik GmbH. All rights reserved.

Contents

1 **Lithium-ion battery packs** 5
What is particular about Li-Ion 5
Why a stored pack goes flat 5

2 **Charging, storage and shipping** 6
Charging rules 6
For the AirChek TOUCH 6
Handling and disposal 7
Shipping 7

3 **Contacts** 8

CHAPTER 1

Lithium-ion battery packs

What is particular about Li-Ion

Li-Ion cells store much energy for their weight, which is why the more powerful SKC pumps can run for long sampling times on one pack. The chemistry also has its own needs. A battery is a perishable product: it starts to age the day it is made, whether it is used or not. How many charge cycles it gives depends on the cell chemistry and on how it is used — above all on temperature and on the pattern of charging and discharging. Charging, using and storing the pack as described in Charging, storage and shipping (p. 6) gives the best performance and the longest cycle life.

Table 1-1. Li-Ion battery packs at a glance

Cycle life	about 300–500 charge cycles
Energy density	high
Environmental impact	low

Table 1-2. Strengths and limitations

Strengths	Limitations
High energy density	Shorter shelf life
Low self-discharge of the cells	Sensitive to temperature
Lower weight	Must not be short-circuited, destroyed or burned
Higher voltage	Special packing and shipping regulations apply

Why a stored pack goes flat

To meet the requirements for intrinsic safety, the battery packs of the instruments marked in Table 1-3 (p. 5) contain protective circuitry. This circuitry draws a small current all the time, so a pack slowly loses its charge even when the instrument is switched off and left on the shelf, although the cells themselves discharge only slowly. For this reason, always charge the pack before you use the instrument.

Table 1-3. SKC instruments with Li-Ion battery packs

Instrument	Type	Protective circuitry in the pack
AirChek TOUCH	Sample pump	Yes
AirChek Essential	Sample pump	Yes
AirChek Essential+	Sample pump	Yes
AirChek Connect	Sample pump	Yes
AirChek XR5000	Sample pump	Yes
Pocket Pump TOUCH	Sample pump	Yes
Leland Legacy	Sample pump	Not stated by SKC
QuickTake 30	Sample pump	Not stated by SKC
NoiseCHEK	Personal noise dosimeter, Li-Ion polymer cells	Yes: intrinsically safe models 701-001S, 701-00NBS and 701-001NBVAS

CHAPTER 2

Charging, storage and shipping

Charging rules

1. Charge SKC pump battery packs only in SKC-approved Li-Ion chargers, for one pump or for five.
2. Charge a new pack completely as soon as you receive it.
3. Charge the pack before every use. A pack that has been standing loses charge (see Why a stored pack goes flat (p. 5)).
4. If the pack is in storage, charge it every 2 months.
5. Store it at about 21 °C (70 °F), the ideal storage temperature. The warmer the store, the faster the pack discharges itself.

Note
The NoiseCHEK personal noise dosimeter has Li-Ion polymer cells. Charge it only in its own NoiseCHEK charging docks: 701-002 for one unit, 701-003 for five.

For the AirChek TOUCH

WARNING

Charging the pump, removing or fitting its battery pack, or running it from the charging cradle in an atmosphere that may be explosive can ignite the atmosphere. This can cause an explosion. Charge the pump, change its battery pack and run it from a charging cradle only in a non-hazardous area. Replace the battery only with the SKC Unlisted Component Battery Pack, model P75718 or P75718A; any other battery may cause a fire or an explosion. Charge only in an SKC charging cradle 220-900, 220-800 or 220-850; the maximum charge input voltage is U_m = 12 V.

WARNING

Replacing a component of the pump with one that is not approved can impair its intrinsic safety. In a hazardous location, the pump can then ignite an explosive atmosphere. Replace components only with approved parts.



SKC AirChek TOUCH Model 220-5000TC SN 99999
Intrinsically Safe/ Sécurité Intrinsèque Air Sampling Pump
Class I, Groups A, B, C, D; Class II, Groups E, F, G; Class III, T-Code T3C;
Class I, Zone 0, Group IIC

Figure 2-1. Markings on the rating label of the AirChek TOUCH, model 220-5000TC, as printed in its operating instructions.

Battery pack	Li-Ion, 7.2 V, 3.3 Ah, 24 Wh. Approved packs P75718 and P75718A; replacement pack P75718A.
Approved charging cradles	220-800 Standard Charging Cradle, 220-900 Charging e-Cradle, 220-850
Power supply	220-600 for one cradle; 220-700 for a chain of up to five cradles
Charging time	about 3 hours, depending on the capacity and the state of discharge
Charging temperature	32–113 °F (0–45 °C)
Storage temperature	−4 to 113 °F (−20 to 45 °C); ideally about 21 °C

NOTICE

If you remove the battery pack while the pump is switched on, the time, the date and other settings are lost. Switch the pump off before you remove the pack. A pack that you put back must be charged to at least 25 % (two bars on the battery icon).

Handling and disposal

⚠ WARNING

Short-circuiting, crushing, taking apart or burning a battery pack is a fire and burn risk. An AirChek TOUCH pack heated above 100 °C (212 °F) can catch fire or explode. Do not short-circuit, crush or take a pack apart, do not burn it, and do not heat an AirChek TOUCH pack above 100 °C (212 °F). Store packs where children cannot reach them, and leave them in the packaging they came in until they go into a pump. Dispose of used packs promptly, following your local recycling or waste regulations — never in a fire.

Shipping

Li-Ion batteries are dangerous goods in transport, and pumps that contain them must be packed and shipped under the lithium battery rules.

- The rechargeable Li-Ion batteries of SKC sample pumps and of the NoiseCHEK dosimeter have been tested to the UN Manual of Tests and Criteria, Part III, subsection 38.3, and pass every test in it.
- Each battery is rated below 100 Wh.
- Shipments fall under UN 3480 (batteries on their own) or UN 3481 (batteries packed with or inside equipment). Ask your carrier for its current rules before you ship.

Before you return a pump to Analyt-MTC for service, ask Analyt-MTC how to pack it; the contact details are in Contacts (p. 8) and on the back cover.

CHAPTER 3

Contacts

Contact and support

ANALYT-MTC Messtechnik GmbH

German Headquarters

Klosterrunsstraße 18, 79379 Müllheim
Germany

+49 7631 5545

info@analyt-mtc.de

French Subsidiary

175 Avenue d'Alsace, 68000 Colmar
France

+33 3 89 41 47 78

info@analyt-mtc.fr

www.analyt-mtc.com

Batteries and shipping

Contact Analyt-MTC for replacement battery packs, charging cradles, advice on battery problems and on returning or shipping a pump. Have at hand:

- the pump model and serial number;
- the battery pack catalogue number, for example P75718;
- how old the pack is and how it has been stored.

ANALYT-MTC Messtechnik GmbH

Sales, service and calibration

German Headquarters
Klosterrunsstraße 18, 79379 Müllheim
Germany
+49 7631 5545
info@analyt-mtc.de

French Subsidiary
175 Avenue d'Alsace, 68000 Colmar
France
+33 3 89 41 47 78
info@analyt-mtc.fr

www.analyt-mtc.com

AMTC-TN-0006 · Rev. 2 · 2026-10

© 2026 ANALYT-MTC Messtechnik GmbH. All rights reserved. Subject to technical changes without notice.