SKC Sidekick MTX Range

Personal air sampling pumps for dust, gas and vapours, 5 to 3000 mL/min

The Sidekick is a personal air sampling pump for dust, gas and vapours in three models: the standard 224-50MH, and the intrinsically safe 224-51MTX and 224-52MTX with ATEX and UKEX certification. The 224-52MTX adds an elapsed-time display.



750–3000	5–500	25 inH_2O	8 h	±5 %
Constant flow, mL/min	Low flow with adapter, mL/min	Back pressure at 1000 mL/min	Minimum run time at 3000 mL/min	Flow control

Performance

Flow range	750–3000 mL/min, constant flow operation 5–500 mL/min with adapter, constant pressure operation
Flow control	±5 % of set point, constant flow
Typical run time	8 hours minimum at 3000 mL/min against 15 inH_2O back pressure
Typical media back pressure	IOM sampler with GFA filter at 3 L/min: approximately 7 inH_2O IOM sampler with 0.8 µm MCE filter at 2 L/min: approximately 15 inH_2O
Flow fault (224-52MTX)	Obstructed tubing or excessive filter loading: shutdown after 15 seconds Four automatic restarts before the pump shuts down completely
Low flow sampling	Constant pressure controller (CPC) and low flow adapter for one to four tubes Set the pump to approximately 1.5 L/min first; set each tube with its throttle valve

Operating conditions

Temperature	Storage and operating: –20 °C to +40 °C
Humidity	Operating: 0–95 % RH
Media	Dust, gas and vapours

Mechanical

Dimensions	145 × 79.5 × 57 mm (H × W × D)
Weight	224-50MH: 465 g 224-51MTX and 224-52MTX: 575 g
Enclosure rating	IP20; not water- or splashproof, do not use where water can enter the case
Anti-tamper cover	The pump controls sit beneath a clear anti-tamper cover
Particulate trap	Built-in replaceable filter; replace it every 2–3 months or when it looks dirty

Electrical and communication

Battery pack	NiMH rechargeable, 2.0 Ah, 4.8 V
Charging	Single charger 223-203A or five station charger 223-113A, 100–240 V, 50/60 Hz Timed 16-hour constant current charge, then trickle charge
Mains power	Battery eliminator 223-300B (EU 2-pin plug) or 223-300C (UK 3-pin plug), 230 V, 50 Hz ATEX and UKEX certification invalid while fitted; not for hazardous areas
Low battery shutdown	Automatic on all models; prevents over-discharge of the battery pack
Run indicator	224-50MH and 224-51MTX: LED run indicator
Timer (224-52MTX)	LCD: elapsed run time 0–99 999 minutes, accuracy ±0.05 % Low battery and flow fault indication; run time retained after either shutdown

Compliance

Markings	II 1G Ex ia IIC T4 Ga (224-51MTX and 224-52MTX)
ATEX	SIRA 02ATEX2135; Directive 2014/34/EU; EN IEC 60079-0:2018 and EN 60079-11:2012
UKEX	CSAE 22UKEX1385; UK 2016 No. 1107; EN IEC 60079-0:2018 and EN 60079-11:2012
Hazardous areas	Zones 0, 1 and 2; flammable gases and vapours; groups IIA, IIB and IIC; T1 to T4
Certified ambient temperature	−20 °C to +40 °C only
Standard model	224-50MH: not intrinsically safe, no ATEX or UKEX certification
Safety related device	Not assessed as a safety related device (Directive 2014/34/EU Annex II, clause 1.5)
UL variants	A variant range is UL certified; not for hazardous areas in the EU or UK Components must not be interchanged between the UL and ATEX/UKEX variants

Spare parts

Case and inlet	P20105: clear cover and hinge pin P20104GY: belt clip P20106GY: inlet hosetail and seal P40370: inlet filter, pack of 10
Battery packs	P78050MH: 4.8 V, 2.0 Ah, NiMH, for the 224-50MH P78051MTX: 4.8 V, 2.0 Ah, NiMH, for the 224-51MTX and 224-52MTX
Pump unit	P2010802: pulsation dampener; P213201: valve plate assembly, set of 2 P22417G: pump body; P2129B: yoke / diaphragm assembly
Internal parts	The complete range goes only to the manufacturer's authorised service centres; for parts not listed, ask Analyt-MTC

Models and ranges

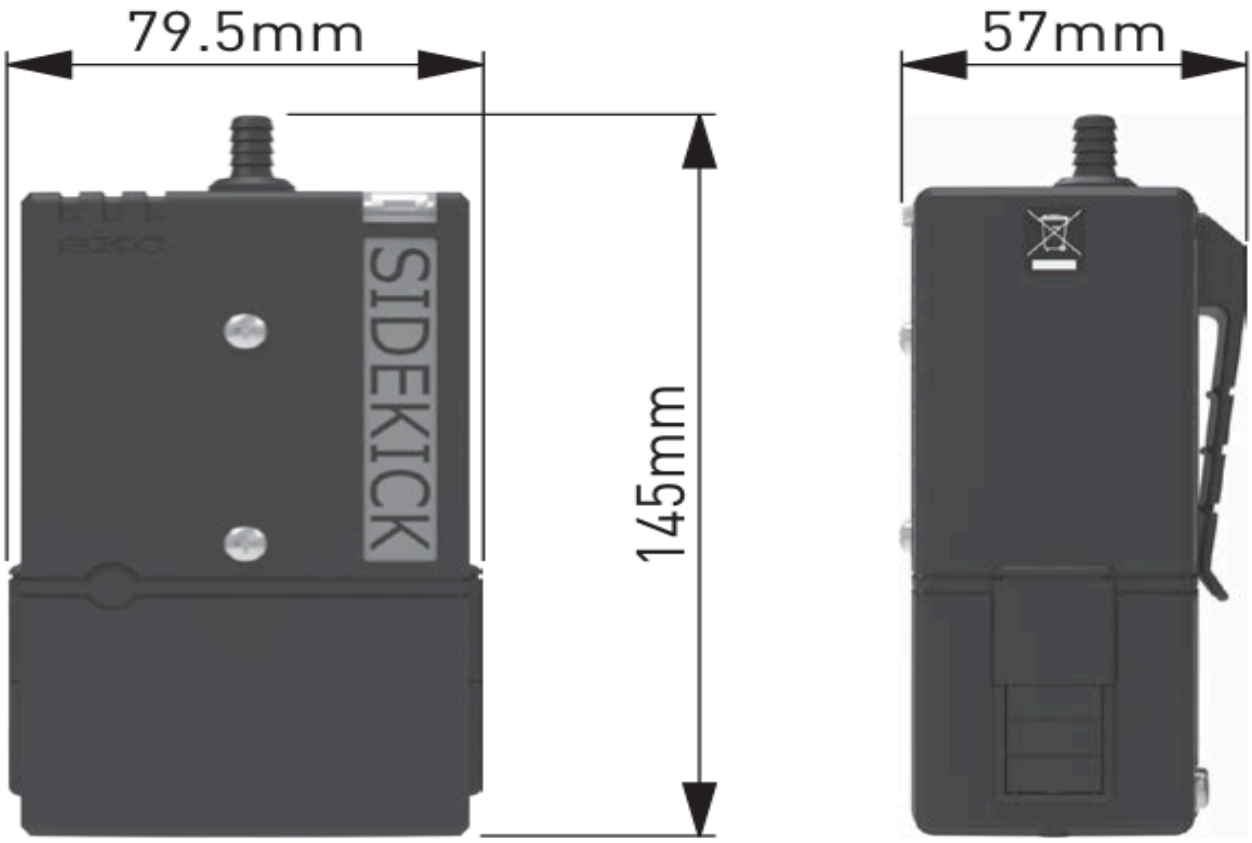
Model	Order code	Control and display	Intrinsic safety
Standard	224-50MH	On/off, LED run indicator	Not intrinsically safe
Intermediate	224-51MTX	On/off, LED run indicator	ATEX and UKEX
Deluxe	224-52MTX	On/off, elapsed time LCD, flow fault	ATEX and UKEX

Safe use

Hazardous areas	Do not charge the battery pack in a hazardous area Use only SKC approved chargers designated for the model
Damage	Do not use a pump damaged in a way that could invalidate intrinsic safety Example: a cracked battery pack enclosure that exposes components or cells
Site suitability	If unsure whether the pump suits your environment, check its intrinsic safety rating with your site manager before use
Sampling care	Never run the pump long term without a tube or filter medium in place Long-term colour change tubes: use a tandem tube holder with trap tube Impingers: fit a trap before the pump inlet; set the flow below 1 L/min first

Compensation range

Flow rate (mL/min)	Back pressure (inH_2O)
750	5–25
1000	0–25
2000	0–25
3000	0–15



Front and side views with the outer dimensions, from the manufacturer's operating instructions.

Pumps and kits

Kit	Contents	Standard, order code	Intermediate, order code	Deluxe, order code
Pump only	Pump, NiMH battery pack, screwdriver set, manual	224-50MH	224-51MTX	224-52MTX
Basic kit, 1 pump	Single charger, 1 m tubing, guide, carry case	224-50MHK	224-51MTXK	224-52MTXK
Basic kit, 5 pumps	Five station charger, 1 m tubing per pump, carry case	224-50MHK5	224-51MTXK5	224-52MTXK5
Dust kit, 1 pump	Basic kit plus IOM sampler, 5 cassettes, foams, Calidaptor	224-50MHKP	224-51MTXKP	224-52MTXKP
Dust kit, 5 pumps	5 IOM samplers, 15 cassettes, foams, Calidaptor	224-50MHK5P	224-51MTXK5P	224-52MTXK5P
Vapour kit, 1 pump	Basic kit plus tube holder, tube cover, tube breaker	224-50MHKV	224-51MTXKV	224-52MTXKV
Vapour kit, 5 pumps	5 tube holders, 5 tube covers, tube breaker	224-50MHK5V	224-51MTXK5V	224-52MTXK5V
Combined kit, 1 pump	Dust and vapour accessories as above	224-50MHKC	224-51MTXKC	224-52MTXKC
Combined kit, 5 pumps	Dust and vapour accessories as above, for 5 pumps	224-50MHK5C	224-51MTXK5C	224-52MTXK5C

Order from Analyt-MTC with the order codes. Kits add the Step by Step Guide and the operating manual.

Dust sampling accessories

Order code	Description
225-70A	IOM sampler, plastic, plastic cassette, clip
225-76A	IOM sampler, stainless steel, steel cassette, clip
225-79A	IOM sampler, plastic, stainless steel cassette, clip
225-71A	IOM plastic cassette with cap and clip
225-75A	IOM stainless steel cassette with cap and clip
391-01	Calidaptor flow calibration adapter for IOM
225-772	IOM foam plug, pack of 10

Order code	Description
225-772-50	IOM foam plug, pack of 50
225-69	Cyclone sampler, plastic, plastic cassette for 25 mm filters
225-69-37	Cyclone sampler, plastic, plastic cassette for 37 mm filters
225-62	Cyclone cassette, 25 mm filters, with clip
225-62-37	Cyclone cassette, 37 mm filters, with clip
225-67-10	Filter transport cassette, 25 mm, pack of 10

Gas and vapour sampling accessories

Order code	Description
224-26-CPC	Constant pressure controller (CPC), 20 inH_2O
224-26-01	Adjustable low flow adapter / tube holder, single
224-26-02	Adjustable low flow adapter / tube holder, double
224-26-03	Adjustable low flow adapter / tube holder, triple
224-26-04	Adjustable low flow adapter / tube holder, quadruple
224-29A	Protective cover type A, 6 mm × 70 mm

Order code	Description
224-29B	Protective cover type B, 8 mm × 110 mm
224-29C	Protective cover type C, 10 mm × 150 mm
224-29D	Protective cover type D, 10 mm × 220 mm
224-29P	Protective cover for low volume PUF tubes
224-29V	Tube holder for OVS tube
Ask Analyt-MTC	Tube tip breaker

Key accessories

Single battery charger, 100–240 V, UK/EU/US/AUS plugs	223-203A
Five station battery charger, 100–240 V, UK/EU/US/AUS plugs	223-113A
Battery eliminator, 230 V, EU 2-pin plug	223-300B
Battery eliminator, 230 V, UK 3-pin plug	223-300C
chek-mate, 20–500 mL/min, ±1 % of reading (±2.5 % at 20–50 mL/min)	375-00205
chek-mate, 0.5–5.0 L/min, ±1 % of reading (±2.5 % at 0.5–0.75 L/min)	375-0550
Rotameter, 20–250 mL/min, ±2.5 % of full scale	393-002025
Rotameter, 0.3–3.4 L/min, ±2.5 % to VDI/VDE 3513-2:2008	393-0334

ANALYT-MTC Messtechnik GmbH
Sales, service and calibration

www.analyt-mtc.com

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

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

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