

## TECHNICAL DATA

SCALES	Density [g/cm <sup>3</sup> ], Relative Density, Brix [%Brix], Concentration of alcohol [vol%], Concentration of sulphuric acid [wt%] User-defined
MEASUREMENT RANGE	0–3 g/cm <sup>3</sup>
MEASUREMENT ACCURACY	DS7700: ±0.001 g/cm <sup>3</sup> ; DS7800: ±0.0001 g/cm <sup>3</sup>
MEASUREMENT PERIOD	Typically 1–3 minutes including temperature control
SAMPLE VOLUME IN CASE OF MANUAL INJECTION	0.9 ml
AMBIENT TEMPERATURE	10–40 °C
TEMPERATURE CONTROL RANGE	10–40 °C
TEMP. MEASUREMENT ACCURACY	±0.02 °C
METHODS	A practically unlimited number of methods can be set
MANUFACTURER'S CALIBRATION	With air and water at 9 temperatures each
ADJUSTMENT	Automatic (menu-driven), with dried air and distilled water
CONTROL	7.0" capacitive touchscreen, 800 x 480 pixels
HOUSING	Aluminium cast, powder-coated
INTERFACES	1x USB, 1x RS-232, 1x Ethernet
OPERATING VOLTAGE	100–240 V, 47–63 Hz
POWER CONSUMPTION (OPERATION)	25 W
POWER CONSUMPTION (MAX.)	120 W
DIMENSIONS (W X H X D)	220 mm x 220 mm x 430 mm
WEIGHT	5.3 kg

Version 4.3 | Status: June 2022 | Subject to modifications and errors.

## OVERVIEW OF DENSITY METER SETS AND CONSUMABLES

ORDER NUMBER	SETS AND SET COMPONENTS
DS7700-1/DS7800-1	SET 1 FOR MANUAL SAMPLE SUPPLY, CONSISTING OF:
DS7700 or DS7800	Density meter with glass U-tube oscillator, measurement accuracy $\pm 0.001 \text{ g/cm}^3$ or $\pm 0.0001 \text{ g/cm}^3$
DS7050	Drying unit with 2/2-way valve
DS7001	Tygon tube set for use with Luer syringe, consisting of: air tube (320 mm); waste tube (320 mm); tube connection Luer, 2 pieces
DS7005	Luer nozzle, 2 pieces
DS7009	Luer syringe, 2 ml, 10 pieces
DS7010	Luer syringe, 10 ml, 10 pieces
DS7019	PE waste container with lid, 600 ml
DS7700-2/DS7800-2	SET 2 FOR MANUAL SAMPLE SUPPLY, CONSISTING OF:
DS7700 or DS7800	Density meter with glass U-tube oscillator, measurement accuracy $\pm 0.001 \text{ g/cm}^3$ or $\pm 0.0001 \text{ g/cm}^3$
DS7050	Drying unit with 2/2-way valve
DS7001	Tygon tube set for use with Luer syringe, consisting of: air tube (320 mm); waste tube (320 mm); tube connection Luer, 2 pieces
DS7003	PTFE tube set for use with Luer syringe, consisting of: drain tube (400 mm); waste tube (280 mm); PEEK hollow screw, flanged and mounted, 3 pieces
DS7020	PTFE splash guard
DS7021	Adaptor olive/UNFa for sample discharge through Tygon tube via UNF nozzle
DS7007	Luer, UNF nozzle, 1 piece each
DS7009	Luer syringe, 2 ml, 10 pieces
DS7010	Luer syringe, 10 ml, 10 pieces
DS7019	PE waste container with lid, 600 ml
DS7700-3/DS7800-3	SET 3 FOR SEMI-AUTOMATIC SAMPLE SUPPLY, CONSISTING OF:
DS7700 or DS7800	Density meter with glass U-tube oscillator, measurement accuracy $\pm 0.001 \text{ g/cm}^3$ or $\pm 0.0001 \text{ g/cm}^3$
DS7060	Drying unit with 3/2-way valve
DS7070	Peristaltic pump
DS7002	Tygon tube set for use with drying unit DS7060, consisting of: suction tube (320 mm); drain tube (320 mm); air tube (320 mm); waste tube (320 mm); tube connection Luer, 3 pieces
DS7072	Tube set for peristaltic pump DS7070, consisting of: TPE pump tube (105 mm), 5 pieces; PTFE tube connection (olive), 2 pieces
DS7005	Luer nozzle, 2 pieces
DS7009	Luer syringe, 2 ml, 10 pieces
DS7010	Luer syringe, 10 ml, 10 pieces
DS7019	PE waste container with lid, 600 ml
DS7700-4/DS7800-4	SET 4 FOR FULLY AUTOMATIC SAMPLE SUPPLY, CONSISTING OF:
DS7700 or DS7800	Density meter with glass U-tube oscillator, measurement accuracy $\pm 0.001 \text{ g/cm}^3$ or $\pm 0.0001 \text{ g/cm}^3$
DS7060	Drying unit with 3/2-way valve
DS7070	Peristaltic pump
AS80 or AS90	Autosampler for 18 or 36 samples, including: sample plate 18x 50 ml (42 mm x 43 mm) or 36x 30 ml (28 mm x 65 mm) set polypropylene vials (50 ml) or glass vials (30 ml); other vials on request PTFE connecting tube or Autosampler for 53 or 89 samples, including: sample plate 53x 16 ml (22 mm x 55 mm) or 89x 6 ml (16 mm x 55 mm) set polypropylene vials (16 or 6 ml); other vials on request PTFE connecting tube
DS7002	Tygon tube set for use with drying unit DS7060, consisting of: suction tube (320 mm); drain tube (320 mm); air tube (320 mm); waste tube (320 mm); tube connection Luer, 3 pieces
DS7072	Tube set for peristaltic pump DS7070, consisting of: TPE pump tube (105 mm), 5 pieces; PTFE tube connection (olive), 2 pieces
DS7021 (2x)	Adaptor olive/UNFa for connecting the Tygon tubes to the drying unit DS7060
DS7022 (optional)	Adaptor UNFi/Luer for the sample supply with autosampler AS80 or AS90 via Luer nozzle
DS7005	Luer nozzle, 2 pieces
DS7009	Luer syringe, 2 ml, 10 pieces
DS7010	Luer syringe, 10 ml, 10 pieces
DS7019	PE waste container with lid, 600 ml

## OVERVIEW OF DENSITY METER SETS AND CONSUMABLES

DS7700-5/DS7800-5	SET 5 FOR FULLY AUTOMATIC SAMPLE SUPPLY, CONSISTING OF:
DS7700 or DS7800	Density meter with glass U-tube oscillator, measurement accuracy $\pm 0.001 \text{ g/cm}^3$ or $\pm 0.0001 \text{ g/cm}^3$
DS7060	Drying unit with 3/2-way valve
DS7070	Peristaltic pump
AS80 or AS90	Autosampler for 18 or 36 samples, including: sample plate 18x 50 ml (42 mm x 43 mm) or 36x 30 ml (28 mm x 65 mm) set polypropylene vials (50 ml) or glass vials (30 ml); other vials on request PTFE connecting tube or Autosampler for 53 or 89 samples, including: sample plate 53x 16 ml (22 mm x 55 mm) or 89x 6 ml (16 mm x 55 mm) set polypropylene vials (16 or 6 ml); other vials on request PTFE connecting tube
DS7004	PTFE tube set for use with drying unit DS7060, consisting of: suction tube (280 mm); drain tube (400 mm); connecting tube (340 mm); waste tube (280 mm); PEEK hollow screw, flanged and mounted, 6 pieces
DS7071	Tube set for peristaltic pump DS7070, consisting of: TPE pump tube (105 mm), 5 pieces; PTFE tube connection UNF, 2 pieces
DS7023	Adaptor Luer/UNFa for the sample supply with syringe via UNF nozzle
DS7006	UNF nozzle, 2 pieces
DS7009	Luer syringe, 2 ml, 10 pieces
DS7010	Luer syringe, 10 ml, 10 pieces
DS7019	PE waste container with lid, 600 ml

ORDER NUMBER	CALIBRATION LIQUIDS
DS7011	DAkKS-certified density standard high-purity water, $0.9982 \text{ g/cm}^3$ at $20 \text{ }^\circ\text{C}$ (second point at $15 \text{ }^\circ\text{C}$ ), 10 ml
DS7012	DAkKS-certified density standard isooctane, $0.6900 \text{ g/cm}^3$ at $20 \text{ }^\circ\text{C}$ (second point at $15 \text{ }^\circ\text{C}$ ), 10 ml
DS7013	DAkKS-certified density standard n-nonane, $0.7200 \text{ g/cm}^3$ at $20 \text{ }^\circ\text{C}$ (second point at $15 \text{ }^\circ\text{C}$ ), 10 ml
DS7014	DAkKS-certified density standard dichlorotoluene, $1.2500 \text{ g/cm}^3$ at $20 \text{ }^\circ\text{C}$ (second point at $15 \text{ }^\circ\text{C}$ ), 10 ml
DS7015	DAkKS-certified density standard tetrachloroethene, $1.6200 \text{ g/cm}^3$ at $20 \text{ }^\circ\text{C}$ (second point at $15 \text{ }^\circ\text{C}$ ), 10 ml

Version 4.3 | Status: June 2022 | Subject to modifications and errors.