



MPA-300

Benchtop Multi-Parameter Analyzer

MPA-300

Product introduction

GENERAL FEATURES

- High resolution LCD display, 7.0 inches.
- Multi-reading feature allows auto-read, timed-read and continuous-read. pH Automatic recognition pH buffers. Fast calibration and more accurate measurement Smart UI design Best user experience, highly efficient measurement.
- 1-5 points calibration with Standard Recognition.
- Automatic/Manual temperature compensation ensures accurate results.
- Auto-hold feature senses and locks the measurement endpoint.
- Data Storage 500 sets (GLP-compliant).
- Support for USB or RS-232 communication.
- Reset feature automatically resumes all settings back to factory default options.
- IP54 waterproof.

Ion

- MPA-300 Series: 1-5 points calibration with polyline fitting or linear fitting.
- Selectable measurement unit, including µg/L, mg/L, g/L, mmol/L, pX, ppm, ppb, etc.
- Multi-measurement modes are supported, including Direct Reading mode, Standard Addition mode, Sample Addition mode and GRAN mode.
- Over 10 methods are built-in, including F⁻, Cl⁻, Br⁻, I⁻, NO₃⁻, BF₄⁻, NH₄⁺, K⁺, Na⁺, Ca²⁺, Cu²⁺, Pb²⁺, Ag⁺ and etc., user-defined method is supported.

pH

- 1-5 points calibration with Standard Recognition.
- MPA-300 Series: Selectable pH buffer groups, including NIST, DIN, GB, USA, GOST.
- Automatic electrode diagnosis with pH slope and offset display.

Conductivity

- 1-3 points calibration with Standard Recognition.
- Settable parameters, including cell constant, temperature compensation coefficient and TDS factor.
- Temperature compensation type (none, linear, pure water).

DO

- Support for air-saturated water or zero oxygen calibration.
- Auto barometric pressure compensation.
- Manual Salinity Factor Correction.
- Selectable pressure unit, including kPa, mbar, Torr, Atm.

Product features

- Automatic recognition pH buffers. Fast calibration and more accurate measurement.
- Smart UI design Best user experience, highly efficient measurement.

Technical specifications

Model		MPA-300F	MPA-300FA
Parameters (up to 11)		pH/EC/ISE/DO/Temp. (mV/pX/Resistivity/TDS/Sal. / DO Saturation)	pH/EC/ISE/ Temp. (mV/ pX/Resistivity/ TDS/Sal.)
PH	Range	(-2.00~20.00) pH	(-2.00~20.00) pH
	Resolution	0.1, 0.01 pH	0.1, 0.01 pH

Model		MPA-300F	MPA-300FA
PH	Accuracy	±0.01 pH	±0.01 pH
	Calibration Points	Up to 5	Up to 5
	Standard customization	Yes	Yes
	Standard recognition	NIST, DIN, GB, USA and GOST	NIST, DIN, GB, USA and GOST
mV	Range	(-2000.0~2000.0) mV	(-2000.0~2000.0) mV
	Resolution	1, 0.1 mV	1, 0.1 mV
	Accuracy	±0.3 mV or ±0.1%	±0.3 mV or ±0.1%
pX	Range	(-2.00~20.00) pX	(-2.00~20.00) pX
	Resolution	0.1, 0.01 pX	0.1, 0.01 pX
	Accuracy	±0.01 pX	±0.01 pX
	Calibration Points	Up to 5	Up to 5
ISE	Range	1.000e-9~9.999e+9	1.000e-9~9.999e+9
	Unit	mol/L, mmol/L, g/L, mg/L, µg/L, ppm, ppb	mol/L, mmol/L, g/L, mg/L, µg/L, ppm, ppb
	Resolution	Up to 4 significant digits	Up to 4 significant digits
	Accuracy	±0.5 %	±0.5 %
	Calibration Points	Up to 5	Up to 5
Conductivity	Range	0.000 µS/cm~1000 mS/cm	0.000 µS/cm~1000 mS/cm
	Resolution	0.001 µS/cm minimum, changed with range	0.001 µS/cm minimum, changed with range
	Accuracy	±1.0%FS	±1.0%FS
	Reference Temperature	20, 25 °C	20, 25 °C
	Calibration Points	Up to 3	Up to 3
	Standard recognition	84µS/cm, 1413µS/cm, 12.88mS/cm	84µS/cm, 1413µS/cm, 12.88mS/cm
Resistivity	Range	5.00Ω·cm~20.00MΩ·cm	5.00Ω·cm~20.00MΩ·cm
	Resolution	0.01Ω·cm minimum	0.01Ω·cm minimum
	Accuracy	±1.0%FS	±1.0%FS
TDS	Range	0.00 ppm~300 ppt	0.00 ppm~300 ppt

Model		MPA-300F	MPA-300FA
TDS	Resolution	0.01ppm minimum, changed with range	0.01ppm minimum, changed with range
	Accuracy	±1.0% FS	±1.0% FS
Salinity	Type	NaCl	NaCl
	Range	(0.0~80.0) ppt	(0.0~80.0) ppt
	Resolution	0.1ppt	0.1ppt
	Accuracy	±2ppt	±2ppt
Dissolved Oxygen Concentration	Sensor Type	Polarographic	/
	Range	(0.00~20.00) ppm	/
	Resolution	0.01ppm	/
	Accuracy	±0.10ppm	/
	Calibration Points	Air-saturated water or zero point	/
	Barometric Compensation	yes	/
Saturation	Manual Salinity Factor Correction	yes	/
	Range	(0.0~200.0) %	/
	Resolution	0.1%	/
Temperature	Accuracy	±2.0 %	/
	Range	(-5~110) °C, (23~230) °F	(-5~110) °C, (23~230) °F
	Unit	°C, °F	°C, °F
	Resolution	0.1	0.1
Measurement	Accuracy	±0.2°C	±0.2°C
	Reading Mode	AutoRead(Fast, Medium, Slow), Timed, Continuous	AutoRead(Fast, Medium, Slow), Timed, Continuous
	Reading prompts	Reading, Stable, Locked	Reading, Stable, Locked
Data management	Temp. Compensation	ATC, MTC	ATC, MTC
	Data storage	500 results each	500 results each
Inputs	GLP Features	Yes	Yes
	pH Electrode	BNC(Q9)	BNC(Q9)

Model		MPA-300F	MPA-300FA
Inputs	Temp. /DO Probe	4-pin aviation connector	4-pin aviation connector
	Temp./Conductivity Probe	5-pin aviation connector	5-pin aviation connector
	Reference Electrode	Banana	Banana
Outputs	USB	PC	PC
	RS 232	printer	printer
Display options	Backlight	Yes	Yes
	Auto Shut-down	1~60 min, of	1~60 min, of
	IP Rating	IP54	IP54
	Date and time	Yes	Yes
General	Power	Output: DC 20V. Configurable power adapter option available.	Output: DC 20V. Configurable power adapter option available.
	Dimensions	242×195× 68 mm	242×195× 68 mm
	Weight	About 900g	About 900g

 Ordering Information

Product model	Order No.	Electrical requirements	Configuration Description
MPA-300F	601004001	DC 20V	Standard configuration
MPA-300FA	601004002	DC 20V	Standard configuration

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