

IONIC Titrator

Technical Specifications

User Interface	
User interface	10" touch-sensitive display (1280 x 800 pixel) with zoom, swipe, drag&drop operation
Dialog languages	English, Chinese, German, Japanese, French, Spanish, Korean, Portuguese
Favorites for quick titration start	Yes
Curve Overlay	Yes
Footprint (main unit)	265 x 322 mm
Connectivity and Communication	
Connectivity	RJ45 (LAN/Ethernet) WLAN 2 x USB A (back) 1 x USB C (front)
Mobile Communication Module (LTE)	Yes (for data export without integration into local network)
Data Export	USB Memory Stick (.csv, PDF Reports, Determinations, methods, instrument backup)
Cloud Data Storage	Metrohm Data Service (determination data, PDF Reports and methods)
Notifications on mobile devices	Yes
Email notifications	Yes
Report options	.csv, PDF, Print
Printers	Compact printer (Thermo or impact printer) Network printer (Laserjet)
Dosing & Stirring	
Attachment of up to four additional modules / stirrers	Dosino Module (250.000 steps per cylinder volume) OMNIS Dosing Module (100.000 steps per cylinder volume) OMNIS Solvent Module for solvent exchange for KF Titration OMNIS Rod Stirrer
Intelligent cylinder units	Yes, available volumes: 2, 5, 10, 20, or 50 mL
Stirrers	Up to two internal magnetic stirrers or additional rod stirrers
Second titration stand	Yes, with magnetic or Rod stirrer

Measuring Interfaces

Up to 3 measuring interfaces	1 x built-in digital measuring interface for dTrodes 2 x additional measuring interfaces (analog or digital)
Differential Amplifier	With analog measuring interface
Measuring range U / resolution	± 2.400 mV / 1.56 μ V
Measuring range T / resolution	-150 °C to $+250$ °C / 0.002 °C (Pt1000)
Polarization current	-200.0 μ A to $+200.0$ μ A (in 0.5 μ A steps)
Measuring interval	100 mS

Peripheral devices

Barcode / QR Code reader	Via USB
Keyboard / Mouse	Via USB
Homogenizer	RS232
Balance connection	RS232

Titration Modes & Applications

Measuring and Titration Modes (First release)	MEAS for pH / U / T / I _{pol} / U _{pol} measurement DET for dynamic equivalence-point titration MET for monotonic equivalence-point titration SET for titration to up to 9 preset endpoints KFT for volumetric Karl Fischer titration with automatic Titration start after sample addition Fix endpoint evaluation with up to 9 fixpoints
Applications	Aqueous & nonaqueous acid/base titration Argentometry Precipitation titrations Redox (ORP) titrations Complexometric titration Surfactant titration Bivoltammetric titration Amperometric titration Volumetric Karl-Fischer Titration

GLP & Compliance

User Management (GLP)	Routine, Expert, Admin, Service
PDF Reports	Results, Method, Parameters, Samples
Monitoring	Sensors & solutions
Curve Overlay	Yes
Advanced statistics	Yes
Regulatory Compliance (optional)	21 CFR Part 11; EudraLex, Volume 4, Annex 11 (Advanced user management, electronic signatures, audit trail)
Subsample log with Audit trail Data	Yes (with compliance license)