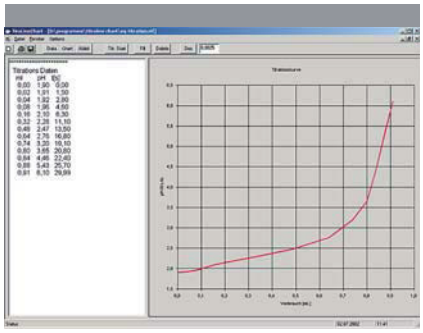
TitroLine *easy*

The intelligent titrator for your routine daily work

Quick and easy as its name suggests

The TitroLine *easy* is the ideal titrator for your routine daily work. This instrument provides you with the perfect combination of a piston burette, a pH/mV meter and integrated intelligence. Ten titration methods for various applications are preinstalled and can be called up easily as required. The methods are pre-parameterised. You only need to select your titration procedure: with a self-searching end point, with a pre-set end point, or manual titration with the ›mouse‹. The titration process begins as soon as you press the start button. This saves you time and money.

Practical and compact: A complete measuring unit. The magnetic stirrer is included. It is connected to the TitroLine *easy*. The bottle set must be ordered separately as an accessory.



With the TitroLine Chart software (option), the titration curve can be displayed on the monitor of a connected PC and the titration data can be processed.

Suitable applications for the TitroLine *easy* include:

- salt content in foods
  (cheese, soya sauce, ketchup)
- total acid in wine and beverages
- nitrogen according to Kjeldahl

Technical data

Measuring amplifier	measuring input pH/mV electrode: pH-input with 12-bit converter
	for highly accurate resolution of the measuring signal during titration
	measuring range pH: 0.00 ... 14.00
	measuring range mV: -1400 ... +1400
	electrode socket according to DIN 19262 or BNC-socket and
	reference electrode 1 x 4 mm
	measuring input temperature sensor Pt 1000,
	measuring range: -30 ... +115 °C
	connection socket 2 x 4 mm and 1 x 2 mm
Keyboard connection	miniature 4 pole round socket, conforming to DIN standards
Stirrer connection	plug-and-socket connection with integrated low-voltage
	power supply (15 V DC) for the magnetic stirrer TM 96
RS-232-C interface	for connecting a printer with serial interface or PC for documentation
Configuration of the RS-232-C interface	preset: 4800 baud, 7-bit word length, 2 stop bits, no parity
Display	matrix-LCD display 69 x 39 mm, 64 x 128 Pixel
	background illumination and contrast adjustment
Volume display	00.00 … 999.9 ml
Display resolution	0.01 ml
Cylinder	20 ml DURAN® borosilicate glass cylinder with UV protection
Dosing accuracy	systematic error 0.1 %,
	random error 0.05 % determined according to EN ISO 8655-6
Calibration	two-point calibration, selection of eight stored buffer solutions
	in conformity with DIN 19 266 and NBS
Valve	3/2-port directional control valve made of PTFE / ETFE
Tubing	FEP with UV protection
Housing material	polypropylene and polyflamm RPP 371 NT, 20 % talcum
Front foil	polyester
Dimensions	135 x 310 x 205 mm (W x H x D),
	including dosing unit, without stirrer
Weight	approx. 2.4 kg
Ambient temperature	+10 … +40 °C (for operation and storage)
Power supply	230 V~; 50/60 Hz or 115 V~; 50/60 Hz
Power consumption	24 VA
Appliance safety	corresponds to Protection Class II in accordance with DIN EN 61 010, Part 1
Conformity	EN ISO 8655, part 3

The sensors –
from SCHOTT Instruments

Suitable sensors include pH combination electrodes with or without integrated temperature sensors (Pt 1000), redox combination electrodes, Ag combination electrodes or separate measuring or reference electrodes.

Stored data: the buffer solutions

Data for 2.00 / 4.00 / 4.01 / 6.87 / 7.00/ 9.18 / 10.01 / 12.45 buffers, including temperature coefficients are already stored in the TitroLine *easy*.

Maximum precision for reproducible results

All components of the TitroLine *easy* are designed for maximum accuracy. The glass cylinders made of DURAN® borosilicate glass are precisely calibrated and provided with an UV protective coating. The motor-controlled 3/2-way valve is made of extremely resistant PTFE/ETFE. This 3/2-way valve enables unpressurised drawing and dosing so that outgassing of liquids is prevented as well as vapour formation due to excessive vacuum pressure.

As robust as required for laboratory operation

All parts of the TitroLine *easy* that come into contact with liquids are made of chemically resistant materials. A polyester front foil protects the keypad and display, and the tubing is in FEP with UV protection.