

Portable pH/Ion Measurement

The Series 2 pH meters are designed to offer the user the convenience of portability whilst providing the accuracy and reliability more usually associated with laboratory measurements.

★FE253

★FE257



Both the FE253 and the FE257 have the following features:

- ★ Accuracy of 0.01 pH
- ★ Automatic/Manual Temperature Compensation
- ★ mV and Temperature read-out
- ★ Splash-proof Case
- ★ Optional Accessory Kit

In addition, the FE257 offers

- ★ Automatic calibration
- ★ Sealed, tactile feedback keypad
- ★ 0.01 mV resolution enabling Ion Concentration Measurement
- ★ Recorder out-put



FE253

The FE253 is a general purpose portable pH/mV/ Temperature meter. One or two point calibration is achieved using traditional manual controls and changes in sample or buffer temperature (and hence pH value) are easily dealt with by the use of the manual or automatic temperature compensation facilities. Successful pH measurement depends on the selection of the correct electrode for the application. Measurement of soap pH for example, requires a different electrode to that needed for measuring pure water. The meter can be used with the complete range of combination or half-cell pH electrodes from EDT Instruments thus ensuring accurate pH measurement, regardless of sample matrix.



FE257

The FE257 is a flexible, portable pH meter in that it offers a choice of manual or automatic control; 0.1mV resolution for ISE work and a recorder output. The meter has error codes built in which guide the user to any potential fault such as incorrect buffers or poor electrode condition.

Automatic Calibration

The pH value of all buffers (and samples) vary depending on the temperature. This means that a pH buffer with the nominal value of, say, 7.00 is only 7.00 at a particular temperature (25°C for EDT buffers). When calibrating an instrument, the user should check the temperature, look up the correct buffer value and then enter that value. The FE257 has these values pre-programmed. The temperature and buffer values are internally checked and then automatically entered, ensuring a fast accurate calibration every time.

FE253 FE257

Specifications

FE253

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|-------------------------------------|-----------------------|
| pH Range: | 0-14pH |
| pH Resolution: | 0.01pH unit |
| pH Accuracy: | ±0.01pH units |
| pH Calibration (Manual): | 1 or 2 point |
| mV Range (Absolute): | 0±2000mV |
| mV Resolution: | 1.0mV |
| mV Accuracy: | ±0.05% or 1 digit |
| mV Range (Relative): | No |
| Manual Temp. Compensation: | 0-100°C |
| Automatic Temp. Compensation: | 0-100°C |
| Temp. Measurement Range: | -30 to +130°C |
| Temperature Resolution: | 0.1°C |
| Temperature Accuracy: | ±0.3°C |
| Instrument size: | 145x80x38.5 mm |
| Instrument weight (with batteries): | 265gms |
| Instrument display: | 12.7mm LCD |
| Power (with Lo. Bat. indication): | 1 x PP3 (9V) |
| Electrode connection: | BNC |
| Reference electrode connection: | 4mm Ø |
| Temp. probe connection: | (3 pole) 3.5mm Ø jack |

FE257

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|---|-----------------------|
| pH Range: | 0-14pH |
| pH Resolution: | 0.01pH unit |
| pH Accuracy: | ±0.01pH units |
| pH Calibration (Manual): | 1 or 2 point |
| pH Calibration (Automatic, with EDT Buffers): | 4, 7, 10 pH |
| mV Range (Absolute): | 0 ± 200mV 0±2000mV |
| mV Resolution: | 0.1mV, 1.0mV |
| mV Accuracy: | ±0.05% or 1 digit |
| mV Range (Relative): | ±1 FS (Back-off) |
| Manual Temp. Compensation: | 0-100°C |
| Automatic Temp. Compensation: | 0-100°C |
| Temp. Measurement Range: | -30 to ±130°C |
| Temperature Resolution: | 0.1°C |
| Temperature Accuracy: | ±0.3°C |
| Instrument size: | 145 x 80 x 38.5mm |
| Instrument weight (with batteries): | 345gms |
| Instrument display: | 12.7mm LCD |
| Memory back-up: | Yes |
| Power (with Lo. Bat. indication): | 1 x PP3 (9v) |
| Electrode connection: | BNC |
| Reference electrode connection: | 4mmØ |
| Temp. probe connection: | (2 pole) 3.5mm Ø jack |
| Recorder output: | ±200.0mV |