

LightEdition Sensors Affordable and Reliable



Affordable and reliable – the LightEdition sensors are tailored for high price/performance ratio. The well thought trough construction is designed for easy handling and low maintenance. Together with the Five series meters, they are the perfect combination for pH, conductivity, dissolved oxygen, and ORP measurements.

Five good reasons for using the LE sensors:

- Compact sensor portfolio for all common applications
- Allows pH, conductivity, dissolved oxygen, and ORP measurements
- Easy operation for trouble-free work
- High quality materials for reliable results
- Designed for low maintenance

METTLER TOLEDO

Ideal for Your Routine Applications

Affordable and Reliable

The variety of sensors is as diverse as the applications they are used for. Only the right combination of quality materials, tried-and-trusted technologies, and the shape of the membrane make a sensor perfectly suited for a specific application.



Ease of Use

Optimized wetting cap could be handled with only one hand, which makes the daily routine simpler



Tried and Trusted

High quality membrane glass and well-established technologies ensure reliable results



Perfect Match








Dedicated sensors for FiveEasy and FiveGo; Compatible with all standard pH meters with BNC connectors and ideal for standard applications

The Right Sensor for Your Application




Application	Sensor type	LE407	LE438 / LE438-IP67	LE409	LE410	LE420	LE422	LE427 / LE427-IP67
Aqueous samples	Pure water							
	Waste water							
	Cold sample (5 °C)							
	Hot sample (70–80 °C)							
Chemicals & biological samples	TRIS buffer							
	Blood plasma							
	Test tube							
	Acids							
	Bases							
	Ethanol							
Food	Milk							
	Yoghurt/Cheese							
	Fruit & Vegetable							
	Meat & Fish							
	Soy sauce							
	Tomato sauce							
Beverages	Cola							
	Fruit juice							
	Beer							
	Wine							
Agriculture	Suspended soil							
Viscous samples	Shower gel							
	Water-based paint							
	Cough syrup							

Specifications

The pH Sensors

							
Sensor model	LE407	LE438 / LE438-IP67	LE409	LE410	LE420	LE422	LE427 / LE427-IP67
Order number	51340330	51340242	51340331	51340348	51340332	30089747	51340333
Order number IP67 version	–	30247153	–	–	–	–	30259840
pH range	0–14		0–14		0–14	0–14	1–11
Temperature range	0–80 °C		0–80 °C		0–80 °C	0–80 °C	0–50 °C
Temperature probe	–	NTC 30 kΩ	–	NTC 30 kΩ	–	–	–
Type of membrane glass	U		HA		HA	U	LoT
Type of junction	Polyester		Ceramic		Movable PTFE sleeve	Ceramic	Ceramic
Reference electrolyte	Gel		3 mol/L KCl AgCl sat.(51350074)		3 mol/L KCl (51350072)	Gel	Gel
Cable and connection	1.0 m, BNC	1.0 m, 2.0 m (for IP67 version), BNC/RCA (Cinch)	1.0 m, BNC	1.0 m, BNC/RCA (Cinch)	1.0 m, BNC	1.0 m, BNC	1.0 m, 2.0 m (for IP67 version), BNC
Shaft material	POM		Glass		Glass	Glass	Glass
Shaft length	120 mm		120 mm		120 mm	120 mm	53 mm
Shaft diameter	12 mm		12 mm		12 mm	4 mm	8 mm
Storage solution	3 mol/L KCl (51350072)		3 mol/L KCl (51350072)		3 mol/L KCl (51350072)	3 mol/L KCl (51350072)	3 mol/L KCl (51350072)

Specifications

	 Conductivity		 DO		 ORP		Temperature	
Sensor model	LE703/ LE703-IP67	LE740	LE621/ LE621-IP67	LE501	LE510		NTC 30 kΩ	
Order number	51340335	51340336	51340403	51340338	51340339		51300164	
Order number IP67 version	30266974	–	30266975	–	–		–	
Measuring range	0.01–200 mS/cm	0.01 µS/cm–500 µS/cm	0–20 mg/L	–2,000–2,000 mV	–2,000–2,000 mV		–	
Temperature range	0–80 °C	0–60 °C	0–50 °C	0–80 °C	0–80 °C		–30–100 °C	
Temperature probe	NTC 30 kΩ	NTC 30 kΩ	NTC 30 kΩ	–	–		NTC 30 kΩ	
Cell constant	0.55	0.08	–	–	–		–	
Cell type	4 graphite poles	2 steel poles	–	–	–		–	
Cable and connection	1.0 m, Mini-DIN; 2.0 m, LTW (for IP67 version)	1.0 m, Mini-DIN	1.0 m, 2.0 m (for IP67 version); BNC/RCA (Cinch)	1.0 m, BNC	1.0 m, BNC		1.0 m, RCA (Cinch)	
Shaft material	Epoxy	PVC/stainless steel	PVC	Glass	POM		Stainless steel	
Shaft length/diameter	120 mm/12 mm	120 mm/12 mm	120 mm/12 mm	120 mm/12 mm	120 mm/12 mm		120 mm/4 mm	
Storage	Dry	Dry	10% NaCl	3 mol/L KCl (51350072)	3 mol/L KCl (51350072)		Dry	

Connection options:

Type	Description	Order Number
DIN Adapter	DIN 19262 adapter for LE407/LE409/LE420/LE422/LE427	30403890
DIN Adapter T Kit	DIN 19262 adapter incl. temperature for LE438/LE410	30499900

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Subject to technical changes
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