

PRODUCT INFORMATION
PROCESS ANALYSIS
ANALYSER
EVITA INSITU 4100 SC



Interference free NH_4 and PO_4 measurements: EVITA INSITU 4100 sc

- **No sample preparation**
- **Measurements carried out directly in wastewater**
- **Simple reagent exchange**
- **Low maintenance; remote maintenance**
- **ISO compliant determination of NH_4 and PO_4**
- **SC 1000 controller for up to 8 sensors**

No sample preparation

The EVITA INSITU 4100 sc analyser is installed in-situ, directly in the tank. Its consistent quick response time ensures reliable on-line readings. The analyser is ideally suited to difficult process control tasks in sewage treatment plants, even in the inflow zone. The antibacterial membrane allows only ions to penetrate inside the sensor bacteria and particles are kept out. This results in accurate, interference-free readings.

One controller, multiple parameters

The SC 1000 is the digital platform for all probes and analysers from HACH LANGE. Up to eight different sensors can be connected to each controller and several SC modules can be connected to create a network. Remote maintenance is made possible by an integrated GSM module. The good news is existing EVITA systems can be upgraded in order to benefit from the advantages of the SC technology.



Technical data & order information

Instrument overview

Type	EVITA INSITU 4100 sc Ammonium		EVITA INSITU 4100 sc Orthophosphate	
Art. no.	081B0039.52.001	081B0040.52.001	081B0042.52.001	081B0043.52.001
Measurement method	Indophenol blue		Molybdenum blue	
Measuring range	0.1-20 mg/l	0.3-100 mg/l	0.05-6 mg/l	0.7-15 mg/l
Accuracy	0.6-20 mg/l: ±10 % <0.6 mg/l: ±0.06 mg/l	1-100 mg/l: ±10 % <1 mg/l: ±0.1 mg/l	0.3-6 mg/l: ±10 % <0.3 mg/l: ±0.03 mg/l	2.4-15 mg/l: ±10 % <2.4 mg/l: ±0.24 mg/l
Response time (delay time/rise time)	12 min. ±1 min. (7 min./5 min.)	24 min. ±1 min. (13 min./11 min.)	13 min. ±1 min. (6 min./7 min.)	13 min. ±1 min. (6 min./7 min.)

Technical data

Measurement interval	Continuous measurement
Automatic calibration	Every 72 hours (selectable) using internal standards
Reagent change	Every 10 weeks
Current output	4-20 mA, max. load 500 Ohm
Protection rating	IP 68 in accordance with IEC 529
Temperature	Air: -20 to +40 °C, fluid: 0 to +35 °C
Supply voltage	20-28 V DC, 6 A
Material	PUR, stainless steel (AISI 316)
Dimensions, weight	350 x 600 mm (D x H), 15 kg

Order information

DESCRIPTION	ART. NO.
SC1000 digital controller for up to eight sensors; with GSM module for remote maintenance. Can be configured to customer specifications. SC1000 or BUS network	LXV400 + LXV402
EVITA sc gateway	081B5010
EVITA sc gateway and power supply For upgrading existing EVITA instruments	081B5011.99.001
Mounting bracket	081B5007
Top part with winch	
Bottom part, for mounting on side of wall	081B5006
Bottom part, for mounting on top of wall	081B5005
Set of reagents for NH ₄ -N, 0.1-20 mg/l	081B8032
Set of reagents for NH ₄ -N, 0.3-100 mg/l	081B8033
Set of reagents for PO ₄ -P, 0.05-6 mg/l	081B8034
Set of reagents for PO ₄ -P, 0.7-15 mg/l	081B8035
Ion membrane for NH ₄ -N, 10 pcs	081B8023
Ion membrane for PO ₄ -P, 10 pcs	081B8024

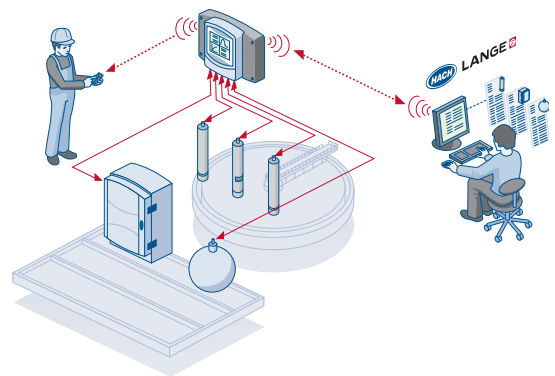
Subject to change.

Minimum maintenance

The antibacterial coating on the ion membrane makes sample preparation unnecessary. Maintenance is limited to 15 minutes for changing the membrane and the reagent container.



Antibacterial ion membrane after one week (left) and after 8 months (right)



Example of SC 1000 installation with remote maintenance