



OPTISENS IAS 1000

Technical Datasheet

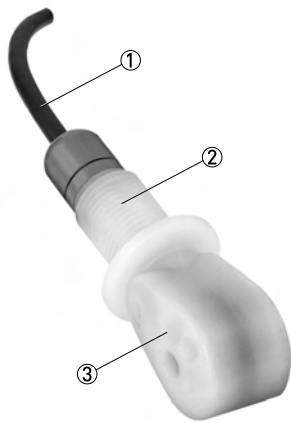
Inductive conductivity sensor

- Fully enclosed inductive conductivity sensor in the OPTISENS 1000 series for use in heavily contaminated, aggressive media in the water and wastewater industries.
- Cost-effective and rugged
- Compact design for pipelines with small diameters

Inductive conductivity sensor for water analysis

The inductive **OPTISENS 1000** conductivity sensor features a compact and extremely rugged design as well as a wide measuring range.

Combined with an **OPTISENS 050** converter, extremely reliable and cost-effective measuring systems can be created. These systems are very well suited for conductivity measurements in severely contaminated, aggressive media in the water and wastewater industries.



- ① Fixed cable 6 m
- ② Process connection
- ③ Measuring cell

Highlights

- Suitable for connection to the OPTISENS 050 converters
- Compact design for pipelines with small diameters
- Wide measuring range (0...2 to 0...2000 mS/cm)
- Corrosion-resistant and dirt-repellent polypropylene
- Completely enclosed measuring cell with two inner, ring-shaped measuring coils
- Integrated temperature sensor
- Fixed cable (6 m)

Industries

- Water industry (water and wastewater treatment)
- Chemicals
- Food & Beverages
- Metal industry and mining
- Paper industry

Applications

- Quality control and process monitoring in steam and cooling water circuits
- Monitoring and control of water neutralisation processes
- Monitoring of cleaning operations
- Control of acid and base concentrations
- Quality control in industrial wastewater applications

Options and variants



Compact design, wide measuring range

Thanks to its compact design, the **IAS 1000** can even be installed in pipelines with relatively small diameters. The minimum depth of immersion is just 50 mm

Warning: Stray field!

When connected to an **OPTISENS 050** converter, the **IAS 1000** also covers a very wide measuring range. You can select 0...2.000 mS/cm as the smallest measuring range and 0...2000 mS/cm as the largest.



OPTISENS 1000 Assemblies

Both an immersion assembly and a flow assembly are available for the **IAS 1000**. The sensor can also be screwed directly into the existing G $\frac{1}{2}$ " process connection.

Assembly for CAS 1000 sensors:

- **MAA 1000** immersion assembly for **IAS 1000**
- **MAA 1000** flow-through assembly for **IAS 1000**, DN40 PP
- Direct process connection of **IAS 1000** via G $\frac{1}{2}$ " thread (EPDM gasket and union nut included in delivery)

Technical data

Measuring system

Measuring principle	Inductive measuring principle
Application range	Conductivity measurement in liquids (aggressive media, wastewater, process water)
Modular design	A typical measuring point is comprised of:
	OPTISENS IAC 050 converter
	OPTISENS IAS 1000 sensor including cable
	Optional: OPTISENS 1000 assembly

Sensor

Type	Plastic enclosure (IP65) for wall mounting
Equipment	Fixed cable 6 m / 19.7 ft
	NTC temperature sensor
	Union nut
	EPDM gasket
Measuring ranges	0...2.000 mS/cm
	0...20.00 mS/cm
	0...200.0 mS/cm
	0 ... 2000 mS/cm
	-30...+140°C / -22...+285°F

Operating conditions

Temperature range	0...90°C / 32...195°F
Max. operating pressure	10 bar / 145 psi (at 20°C / 68°F)

Installation conditions

Immersed installation	MAA 1000 immersion assembly
Inline installation	MAA 1000 flow-through assembly DN40 PP
Direct installation	Via G ½" external sensor thread and union nut with EPDM gasket

Materials

Sensor casing	Polypropylene (PP)
Union nut	Polypropylene (PP)
Gasket	EPDM

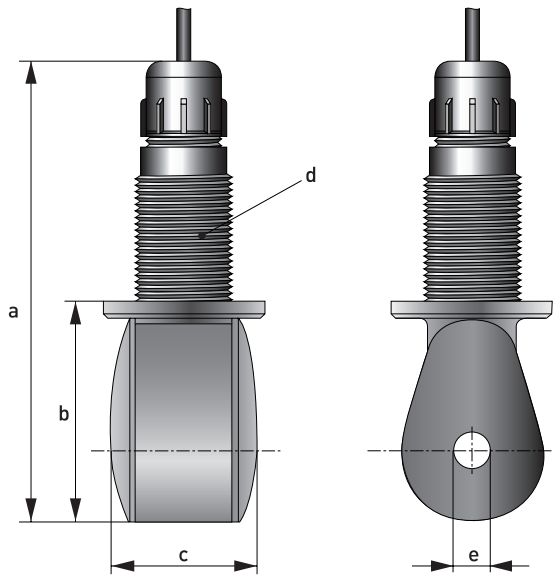
Process connection

Process connection	G ½" external thread
--------------------	----------------------

Electrical connection

Electrical connection	Fixed cable 6 m / 19.7 ft with core cable ends
-----------------------	--

Dimensions



	Dimensions	
	[mm]	[inch]
a	105	4.1
b	50	2
c	32±0.2	1.3±0.008
d	G ½"	
e	8.2±0.05	0.3±0.002

Ordering code

		Sensor	
0	none		
1	OPTISENS IAS 1000		
		Measuring Range	
0	none		
1	0...2/20/200/2000 mS/cm, 0...99°C (32...210°F)		
		Sensor Features	
0	none		
1	PP		
		Process Conditions	
0	none		
2	10 bar (20°C / 68°F), max. 90°C / 194°F		
		Process Connection	
0	none		
1	1/2" Male Thread		
		Sensor Options	
0	none		
2	Temperature Sensor and G 1/2" coupling nut		
		Sensor-Cable-Connection	
0	none		
4	Fixed Cable		
		Cable	
0	none		
1	IAW 1000		
		Cable Features	
0	none		
1	Standard		
		Cable Length	
0	none		
2	6 m (19,5 ft)		
		Cable Options	
0	none		
1	Terminal Ends		
		Documentation	
0	none		
1	English		
2	German		
VGA M	4	Order Number	



KROHNE measuring technology - Product overview

- Electromagnetic flowmeters
- Variable area flowmeters
- Mass flowmeters
- Ultrasonic flowmeters
- Vortex flowmeters
- Flow controllers
- Level measuring instruments
- Temperature measuring instruments
- Pressure measuring instruments
- Analysis
- Oil and gas industry

Addresses:

Germany

Northern sales office

KROHNE Messtechnik GmbH & Co. KG
Bremer Str. 133
D-21073 Hamburg
Phone: +49 (0)40 767 3340
Fax: +49 (0)40 767 33412
nord@krohne.com
ZIP code: 10000 - 29999, 49000 - 49999

Western and middle sales office

KROHNE Messtechnik GmbH & Co. KG
Ludwig-Krohne-Straße
D-47058 Duisburg
Phone: +49 (0)203 301 4416
Fax: +49 (0)203 301 10416
west@krohne.com
ZIP code: 30000 - 34999, 37000 - 48000, 50000 - 53999, 57000 - 59999, 98000 - 99999

Southern sales office

KROHNE Messtechnik GmbH & Co. KG
Landsberger Str. 392
D-81241 Munich
Phone: +49 (0)89 121 5620
Fax: +49 (0)89 129 6190
sued@krohne.com
ZIP code: 0 - 9999, 80000 - 89999, 90000 - 97999

Southwestern sales office

KROHNE Messtechnik GmbH & Co. KG
Rüdesheimer Str. 40
D-65239 Hochheim/Main
Phone: +49(0)6146) 827 30
Fax: +49 (0)6146 827 312
rhein-main@krohne.com
ZIP code: 35000 - 36999, 54000 - 56999, 60000 - 79999

Instrumentation and control equipment catalog

TABLAR Messtechnik GmbH
Ludwig-Krohne-Str. 5
D-47058 Duisburg
Phone: +49 (0)2 03 305 880
Fax: +49 (0)2 03 305 888
kontakt@tablar.de; www.tablar.de

KROHNE sales companies

International

Australia

KROHNE Australia Pty Ltd
Quantum Business Park 10/287
Victoria Rd Rydalmere NSW 2116
Phone: +61 2 8846 1700
Fax: +61 2 8846 1755
krohne@krohne.com.au

Austria

KROHNE Gesellschaft m.b.H.
Modecenterstraße 14
A-1030 Vienna
Phone: +43 (0)1/203 45 32
Fax: +43 (0)1/203 45 32 99
info@krohne.at

Belgium

KROHNE Belgium N.V.
Brusselstraat 320
B-1702 Groot Bijgaarden
Phone: +32 (0)2 4 66 00 10
Fax: +32 (0)2 4 66 08 00
krohne@krohne.be

Brazil

KROHNE Conat Controles
Automaticos Ltda.
Estrada Das Águas Espraiadas, 230
C.P. 56 06835 - 080 EMBU - SP
Phone: +55 (0)11-4785-2700
Fax: +55 (0)11 4785-2768
conat@conat.com.br

China

KROHNE Measurement Instruments
(Shanghai) Co. Ltd., [KMIC]
9th Floor, Puyuan Science Park,
Building A
396 Guilin Road
Shanghai 200233
Tel.: +86 (021) 6470 5656
Fax: +86 (021) 6451 6408
info@krohne-asia.com

Czech Republic

Krohne CZ, spol. s r.o.
Sobiesická 156
63800 Brno
Phone: +420 (0)545.242 627
Fax: +420 (0)545 220 093
brno@krohne.cz

France

KROHNE S.A.S.
Les Ors BP 98
F-26103 ROMANS Cedex
Phone: +33 (0)4 75 05 44 00
Fax: +33 (0)4 75 05 00 48
info@krohne.fr

Great Britain

KROHNE Ltd.
Rutherford Drive
Park Farm Industrial Estate
Wellingborough
Northants NN8 6AE
Phone: +44 (0)19 33 408 500
Fax: +44 (0)19 33 408 501
info@krohne.co.uk

CIS

Kanex KROHNE Engineering AG
Business Centre "POLLARS", office
164
Derbenevskaya nab., 11-B
113114 Moscow/Russia
Tel. / Fax: +7 (0)495 913-68-41
Tel. / Fax: +7 (0)495 913-68-42
Tel. / Fax: +7 (0)495 913-68-43
Tel. / Fax: +7 (0)495 913-68-44
krohne@krohne.ru

India

Krohne Marshall Ltd.
A-34/35, M.I.D.C. Industrial Area,
H-Block
Pimpri Poona 411018
Phone: +91 (0)202 744 2020
Fax: +91 (0)202 744 2020
pcu@vsnl.net

Iran

KROHNE Liaison Office
North Sohravardi Ave. 26,
Sarmad St., Apt. #9
Tehran 15539
Phone: +9821 8874 5973
Fax: +9821 8850 1268
krohne@krohneiran.com

Italy

KROHNE Italia Srl.
Via V. Monti 75
I-20145 Milan
Phone: +39 02 4300 661
Fax: +39 02 4300 6666
info@krohne.it

Korea

KROHNE Korea
Room 508 Miwon Bldg 43
Yoido-Dong Youngdeungpo-Ku
Seoul, Korea
Phone: 00-82-2-782-1900
Fax: 00-82-2-780-1749
mail@krohne.co.kr

Netherlands

KROHNE Nederland B.V.
Kerkeplaat 14
NL-3313 LC Dordrecht
Phone: +31 (0)78 630 6200
Fax: +31 (0)78 630 6405
Service Direct: +31 (0)78 630 6222
info@krohne.nl

Norway

KROHNE Norway A.S.
Ekholtveien 114
NO-1521 Moss
Phone: +47 (0)69 264 860
Fax: +47 (0)69 267 333
postmaster@krohne.no

Poland

KROHNE Polska Sp.z.o.o.
ul. Stary Rynek Oliwski 8a
80-324 Gdansk
Phone: +48 (0)58 520 9211
Fax: +48 (0)58 520 9212
info@krohne.pl

Switzerland

KROHNE AG
Uferstr. 90
CH-4019 Basel
Phone: +41 (0)61 638 30 30
Fax: +41 (0)61 638 30 40
info@krohne.ch

Singapore

Tokyo Keiso - KROHNE (Singapore)
Pte. Ltd.
14, International Business Park,
Jurong East
Chiyoda Building, #01-01/02
Singapore 609922
Phone: (65) 6567 4548
Fax: (65) 6567 9874
tks@tokyokeiso-krohne.com.sg

Republic of South Africa

KROHNE Pty. Ltd.
Bushbock Close
Corporate Park South
Midrand, Gauteng
P.O. Box 2069
Midrand, 1685
Tel.: +27 (0)11 314 1391
Fax: +27 (0)11 314 1681
midrand@krohne.co.za

Spain

I.L. KROHNE IBERIA, S.r.l.
Poligono Industrial Nilo
Calle Brasil, nº. 5
28806 Alcalá de Henares Madrid
Phone: +34 (0)91 883 2152
Fax: +34 (0)91 883 4854
krohne@krohne.es

USA

KROHNE, Inc.
7 Dearborn Road
Peabody, MA 01960
Phone: +1 (800) FLOWING
Phone: +1 (978) 535 6060 (in MA)
info@krohne.com

Representatives

Algeria
Argentina
Cameroun
Canada
Chile
Columbia
Croatia
Denmark
Ecuador
Egypt
Finland
Gabon
Ghana
Greece
Hong Kong
Hungary
Indonesia
Iran
Ireland
Israel
Ivory Coast
Japan
Jordan
Kuwait
Libya
Lithuania
Malaysia
Maldives
Mauritius
Mexico
Morocco
New Zealand
Peru
Portugal
Romania
Saudi Arabia
Senegal
Slovakia
Slovenia
Sweden
Taiwan
Thailand
Tunisia
Turkey
Venezuela
Yugoslavia

Other countries

KROHNE Messtechnik GmbH & Co. KG
Ludwig-Krohne-Str. 5
D-47058 Duisburg
Phone: +49 (0)203 301 0
Fax: +49 (0)203 301 389
export@krohne.com