

Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47

<https://hf.nt-rt.ru/> || haf@nt-rt.ru

CLX-Ex2

Online TRO and Chlorine Monitor for Hazardous Environments

The HF scientific CLX-Ex2 Online TRO and Chlorine Monitor is a rugged, safe, and low maintenance instrument for shipboard ballast water treatment systems that require continuous monitoring and control of Total Residual Oxidant (TRO) levels in hazardous environments. User selectable cycle times, 4-20mA and RS-485 with Modbus output that can be used to control feed pumps and a user selectable alarm allows complete manual or automatic control of chlorine dosing.

Features

- **Optimized for marine applications**
- **For use in explosive atmospheres where combustible fuel vapors may be present**
Housing certified for IECEx and Zone 1 and Zone 2
- **IECEx certified**
ExpXIIC T4 Gb 0°C ≤ Ta ≤ 55°C
- **Total Chlorine**
Can be used for Total Chlorine and TRO measurements
- **Able to operate in ambient temperatures up to 55°C**
- **Low operating costs**
Low reagent use translates into low operating cost
- **Simple operation**
Designed for unattended operation up to 90 days
- **Colorimetric DPD chemistry**
- **Cycle times**
Cycle times can vary between 60 seconds to 10 minutes
- **Alarms**
User selectable alarms for sample concentration
- **Ballast water treatment, drinking water, and wastewater**
- **4-20mA and RS-485 with modbus**
- **High range to 15 mg/l (option) ±10% accuracy**



Ordering Information

PART NUMBER	DESCRIPTION
28034	CLX-Ex2 Online TRO and Chlorine Residual Monitor, 240VAC, with operating manual. Reagents must be purchased separately.

Accessories

PART NUMBER	DESCRIPTION
09950Ex	Replacement tubing/cuvette kit
28895	High Range Option (0-15 mg/l - Factory install)

Reagents

PART NUMBER	DESCRIPTION
09991	Total Chlorine Reagent for CLX-Ex2 - 12 Month Supply (based on estimated BWTS operational cycles)

NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

Specifications

Measurement Range	0 – 10 mg/L (PPM) or 0-15 mg/L
Cycle Time:	User Selectable: 60 seconds to 10 minutes (600 seconds)
Accuracy:	For 0.00 - 10.00 mg/L Range: $\pm 5\%$ of reading or ± 0.03 mg/L (PPM) whichever is greater for range of 0-6.0 mg/L (PPM) $\pm 10\%$ of reading from 6.01-10.00 mg/L (PPM) For 0.00 - 15.00 mg/L Range: $\pm 10\%$ of reading or ± 0.03 mg/L (PPM) whichever is greater
Resolution:	0.01 mg/L (PPM)
Display:	Multi-line liquid crystal backlit display
Alarms:	One NO relay contact 120-240VAC 2A
Analog Output:	Powered 4-10mA, 600 Ω drive, isolated
Communications Port:	Bi-directional RS-485 with Modbus
Water Pressure:	Integral pressure regulator 0.34 bar (5.0 PSI) to 10.3 bar (150 PSI)
Flow Rate to Waste:	200 to 400 ml/min
Operating Temperature:	0°C to 55°C (32°F to 131°F)
Wetted Materials:	PVC, Borosilicate Glass, Reslyn (FFKM), Viton® (FKM), Polypropylene, 316 Stainless Steel, Acetal, Noryl®, Silicone
Sample Temperature Range	0°C to 55°C (32°F to 131°F)
Power Supply	100 to 240VAC, 47-63Hz, 250VA
Insulation Rating	Double Insulated, Pollution Degree 2, Overvoltage Category II
Environmental Conditions	Altitude up to 2000 meters. Up to 95% RH (non-condensing)
IECEx Hazloc Rating	Ex pxb IIC T4 Gb 0°C $\leq$ Ta $\leq$ 55°C
Compressed Air	Water and oil free, -40°F (-40°C) Dew Point, Particles <5 μ , ISA Grade Hydrocarbon Free. Full time clean dry air at 5.5 - 7 bar (80-101.5 PSI) @ 35 SLPM (1.2 SCFM) @ 20°C (68°F) Max
Regulatory Compliance and Certifications	CE Approved, ETL Listed to UL 61010-1 Issued May 11 2013 3rd Ed & ETL certified to CSA 22.2 No. 61010.1 issued May 11 2012, EN 61326:2006
Shipping Weight:	27.2 kg (60 lbs) Reagents are shipped separately
Shipping Dimensions:	93 cm x 62 cm x 32 cm (36-1/2" x 24-1/2" x 12-1/2")

NORYL is a registered trademark of SABIC Innovative Plastics IP B.V.

Viton is a registered trademark of DuPont Performance Elastomers LLC.

Алматы (7273)495-231
Ангaрск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижегород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47

<https://hf.nt-rt.ru/> || haf@nt-rt.ru