

По вопросам продаж и поддержки обращайтесь:

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
Курган (3522)50-90-47
Курск (4712)77-13-04
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
Новосибирск (383)227-86-73
Ноябрьск (3496)41-32-12

Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Пермь (342)205-81-47
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саранск (8342)22-96-24
Саратов (845)249-38-78
Севастополь (8692)22-31-93
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
Улан-Удэ (3012)59-97-51
Ульяновск (8422)24-23-59
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

сайт: www.honeywell.nt-rt.ru || эл. почта: hwn@nt-rt.ru

УРОВНЕМЕРЫ

Технические характеристики
на датчики уровня жидкости

XYR 6000

XYR 6000 Wireless Transmitter

Honeywell OneWireless™ XYR 6000 wireless transmitters break down the barriers to monitoring temperature, pressure, valve position, and other process variables in areas where traditional hard-wired transmitters are too costly, difficult or time consuming to install. These instruments are designed for industrial applications with no access to power, that are remote or difficult to reach, or where manual readings are typically taken. XYR 6000 transmitters are compliant to the ISA100.11a wireless standard, and communicate on the 2.4 GHz ISM band using a IEEE 802.15.4 radio.

The XYR 6000 transmitter family includes instruments for accurately measuring (sensing, processing and wirelessly transmitting) temperature, gauge pressure, absolute pressure, differential pressure, valve position, analog signals, digital inputs and digital outputs.

The instruments wirelessly transmit to each other, to fixed routing devices, or to a gateway forming a managed and secure mesh network. The Honeywell OneWireless™ network is a single wireless mesh network capable of simultaneously supporting ISA100.11a field instruments (such as XYR 60000), Wi-Fi and Ethernet/IP based devices. The network is composed of four interconnected elements: Wireless Device Manager (WDM), Multinodes, Field Device Access Points (FDAP) and field devices.

The XYR 6000 transmitters integrate seamlessly into the Honeywell OneWireless™ network and are compliant with the ISA 100.11a industrial wireless open protocol standard.

Deploying the XYR 6000 wireless transmitters can typically save 50% over wired transmitters. Avoiding the need to run power and communications cables can decrease material and labor costs associated with the installation. This also accelerates the installation, further improving project costs and the overall implementation schedule.

Improve Product Quality

With XYR 6000 transmitters, you can easily increase the number, frequency and types of measurements. Additionally, you can improve accuracy and consistency by replacing manual readings with automated online data collection. Online communication with your control system also helps ensure operator responsiveness and precise time tracking of information for use in troubleshooting potential process problems or developed alarm conditions.



Ensure High Uptime

With more frequent measurements and early detection of asset problems, you can reduce or even prevent incidents.

Reduce Maintenance and Operational Cost

Each XYR 6000 transmitter uses two commonly available “D” size lithium batteries, which enables a savings of up to \$700 over the life of the transmitter over other wireless transmitters having a battery life of up to 10 years.

The transmitters allow monitoring of a range of assets to support proactive, predictive maintenance. XYR 6000 transmitters help identify potential problems that can be costly in terms of excess use of energy and raw materials. Once XYR 6000 instruments are in place, you also can redirect personnel who previously recorded data manually to more productive tasks.

Improve Safety and Meet Regulatory Requirements

Many monitoring points are located in hazardous areas. Installing a wireless transmitter can quickly reduce safety risks by eliminating the need for employees to enter and manually monitor those hazardous area measurement points.

XYR 6000 can help meet regulatory requirements by recording changes and sending data to the control system for date and time stamping. The instruments allow flexible monitoring of process variables throughout critical phases of your process. In fact, the transmitters can even physically move with the process.

XYR 6000 transmitters also help improve water treatment processes and reduce environmental impact by enabling online measurement of additional remote variables, such as waste pond level, which are often measured only locally.

Enhance Flexibility

Because XYR 6000 transmitters are easy and affordable to install, you can add or change measurements as needed. This flexibility supports process improvement and development of new and better products in pilot plant applications.

Wireless technology enhances workforce productivity and flexibility by providing access to plant data and information throughout the site. Operators, technicians and engineers are no longer limited to data and information availability only from the control room.

Overcome Measurement Hurdles

Cost

Going wireless means faster, easier installation and wire savings of \$10 to \$40 per foot.

Time

Simplified installation leads to faster startups and accelerated profits. Local and remote device configurations provide extra flexibility.

Range

The instruments transmit measurements up to 305 m (1,000 ft) LOS* with integral 2 dBi antenna.

** Line Of Sight. Actual range may vary depending upon plant topography.*

PV Publication Rate

1, 5, 10, 30 or 60 sec. configurable

Accuracy

Gauge pressure, differential pressure, temperature and analog input devices offer exceptional accuracy of $\pm 0.1\%$ of full scale readings at reference conditions.

Reliability: XYR 6000 transmitters feature a long battery life (up to 10 years) and a low-battery alarm.

Self-checking software and hardware diagnostics continuously monitor device operation to identify and report parameters that are out of specification.

Ruggedness: Rated for industrial use, XYR 6000 transmitters are ideal for hazardous, remote or hard-to-access locations.

XYR 6000 Transmitter Models

Differential Pressure (DP)

- STDW120 / STDW924 - 0 to 400 in H₂O
- STDW125 - 0 to 600 in H₂O
- STDW130 / STDW930 - 0 to 100 psi
- STDW170 / STDW974 - 0 to 3,000 psi

Gauge Pressure (GP)

- STGW944 (dual head) - 0 to 500 psi
- STGW974 (dual head) - 0 to 3,000 psi
- STGW14L / STGW94L (in-line) - 0 to 500 psig
- STGW17L / STGW97L (in-line) - 0 to 3,000 psig

- STGW18L / STGW98L (in-line) - 0 to 6,000 psig
- STGW19L / STGW99L (in-line) - 0 to 10,000 psig

Absolute Pressure (AP)

- STAW14L / STAW94L (in-line) - 0 to 500 psia

Flange Mount

- STFW128 / STDW928 - 0 to 400 in H2O
- STFW132 / STDW932 - 0 to 100 psi
- STFW12F / STDW92F - 0 to 400 in H2O (pseudo)
- STFW13F / STDW93F - 0 to 100 psi (pseudo)
- STFW14F - 0 to 600 in H2O (pseudo)

Remote Seals – DP, GP, AP models

- STRW12D - 0 to 400 in H2O
- STRW13D - 0 to 100 psi
- STRW14G / STRW94G - 0 to 500 psi
- STRW14A - 0 to 500 psia
- STRW17G - 0 to 3000 psi
- STRW93D - 0 to 2700 in H2O

temperature/DI

- STTW401 - 3 T/C max, 2 RTD max, 3 DI max

Universal I/O

- STUW700 (3 input) - (1-3)HLAI, (1-2)T/C, (1-2)DI
- STUW701 (2 input+1 DO) - (1-2)HLAI, T/C, DI + DO

Note: HLAI = 0/4-20 mA

Analog Input

- STIW600 - 0/4-20 mA or 0/1-5 V

Valve Position Sensor

- WCX1 - linear distance, valve position

Wireless Pressure Transmitter Series XYR 6000 S100 Differential Pressure Models Specifications

34-XY-03-44, October 2

Models:

STDW120	0 to 400 in H ₂ O	0 to 1,000 mbar
STDW130	0 to 100 psi	0 to 7,000 mbar
STDW170	0 to 3,000 psi	0 to 210,000 mbar

Introduction

Building upon the tremendously successful ST 3000 series transmitter line; Honeywell brings simple, safe, and secure wireless technology to its measurement portfolio in the XYR 6000 Series Wireless Transmitters.

The Series 100 XYR 6000 Wireless pressure transmitters offer improved accuracy and performance for those critical applications that require it

The XYR 6000 series measurements are part of the Honeywell OneWireless™ system and are ISA100a Compliant.

Measurement and information without wires!

The XYR 6000 wireless transmitter series enable customers to obtain data and create information from remote and hazardous measurement locations without the need to run wires, where running wire is cost prohibitive and/or the measurement is in a hazardous location. Without wires, transmitters can be installed and operational in minutes, quickly providing information back to your system.

XYR 6000 wireless transmitters send information to an ISA100.11a compliant MESH infrastructure. Wireless Data Manager (WDM) provides the path to bring that information into Experion PKS or any other control system wirelessly via OPC client or Modbus-TCP.

Transmitter power is supplied by two “D” size lithium batteries with an expected lifetime of up to ten years or by an external 24 Vdc power supply. Transmitter range with the integral antenna is 1000’ (305 m) under ideal conditions.



Figure 1 — XYR 6000 Differential Pressure Transmitters

Pressure transmitters continue to bring a proven technology to a wide spectrum of pressure measurement applications, from furnace combustion airflow rate to hydrostatic tank gauging.

The STDW Series Differential Pressure can be used with any primary flow element to provide proven, repeatable flow measurement.

Implement the value of wireless technology today:

- Measure remote access points simply, safe and securely
- Obtain and utilize previously inaccessible information due to high wiring cost or hazardous locations
- Easily meet Regulatory Requirements
- Improve process efficiency
- Enhance Flexibility to monitor applications:
 - that have no access to power
 - that are remote or difficult to reach
 - that may require frequent reconfiguration
 - where manual readings have been required previously.

Specifications

Operating Conditions – All Models

Parameter	Reference Condition (at zero static)		Rated Condition		Operative Limits		Transportation and Storage	
	°C		°C	°F	°C	°F	°C	°F
Ambient Temperature**	25 ±1	77 ±2	-40 to 85*	-40 to 185*	-40 to 85*	-40 to 185*	-40 to 85	-40 to 185
Ambient Temperature LCD Display visible range	25 ±1	77 ±2	-40 to 8	-40 to 185				
Meter Body Temperature STDW120, STDW130, STDW170	25 +/-1	77 ±2	-40 to 110 ¹	-40 to 230 ¹	-40 to 125	-40 to 257	-40 to 85	-40 to 185
Humidity	10 to 55		0 to 100		0 to 100		0 to 100	
Vacuum Region - Minimum Pressure mmHg absolute in H ₂ O absolute	Atmospheric Atmospheric		25 13		2 (short term ²) 1 (short term ²)			
Maximum Allowable Working Pressure (MAWP) ⁴ (XYR6000 products are rated to Maximum Allowable Working Pressure. MAWP depends on Approval Agency and transmitter materials of construction.)	STDW120, STDW130, STDW170 = 4,500psi, 310 bar ³ Static Pressure Limit = Maximum Allowable Working Pressure (MAWP) = Overpressure Limit							
Vibration	Maximum of 4g over 15 to 200Hz.							
Shock	Maximum of 40g.							
Power	Battery powered 3.6V Lithium thionyl chloride (LiSOCl ₂) batteries non rechargeable, size D. There is an option to have the battery fitted or not fitted for shipping.							
	24 Vdc Wired Power (option) - For I.S. Application: 21 V to 25 Vdc Operated with MTL7728P+ barrier (252 Ohms Max. end to end resistance), Max input current 26mA. For Non I.S. application: 11 V to 30 Vdc Input range, Max input current 100mA.							

¹ For CTFE fill fluid, the rating is -15 to 110°C (5 to 230°F)

² Short term equals 2 hours at 70°C (158°F)

³ MAWP applies for temperature range -40 to 125°C. However Static Pressure Limit is de-rated to 3000 psi from -26 to -40°C. Use of graphite o-rings de-rates transmitter to 3625 psi. Use of Adapter with graphite o-rings de-rates transmitter to 3000 psi.

⁴ Consult factory for MAWP of XYR6000 transmitters with CSA approval.

*24V power option rated 80°C (176°F)

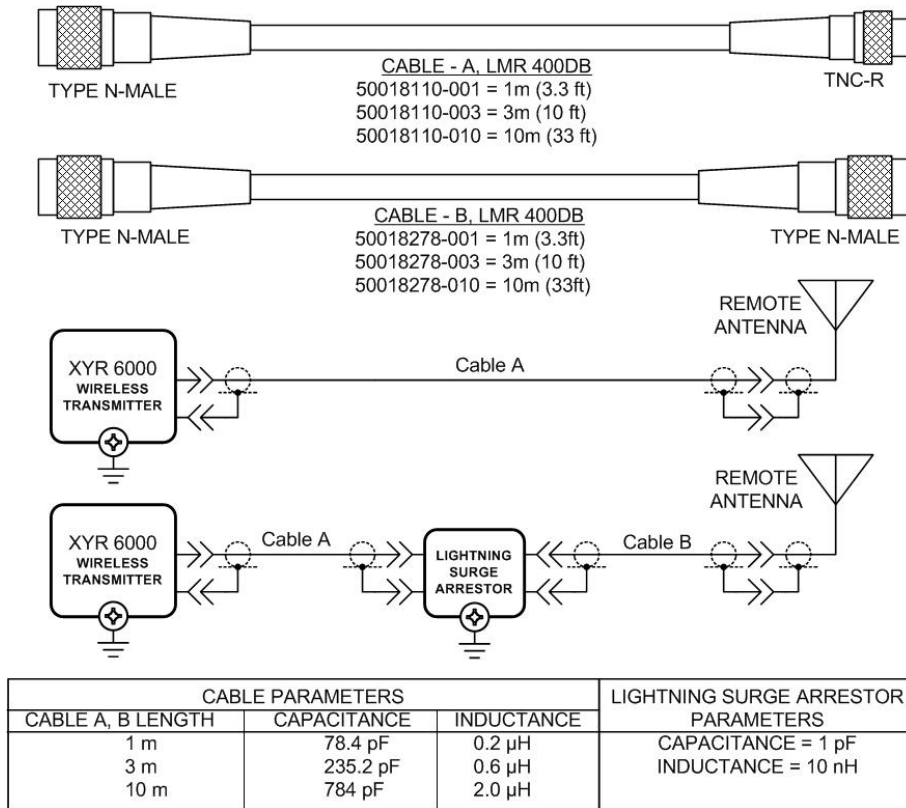
** The Ambient Limits shown are for Ordinary Non-Hazardous locations only. Refer to the appropriate Control Drawing, FM/CSA, ATEX, or IECEx for the Ambient Limits when installed in Hazardous Locations.

Wireless Specifications

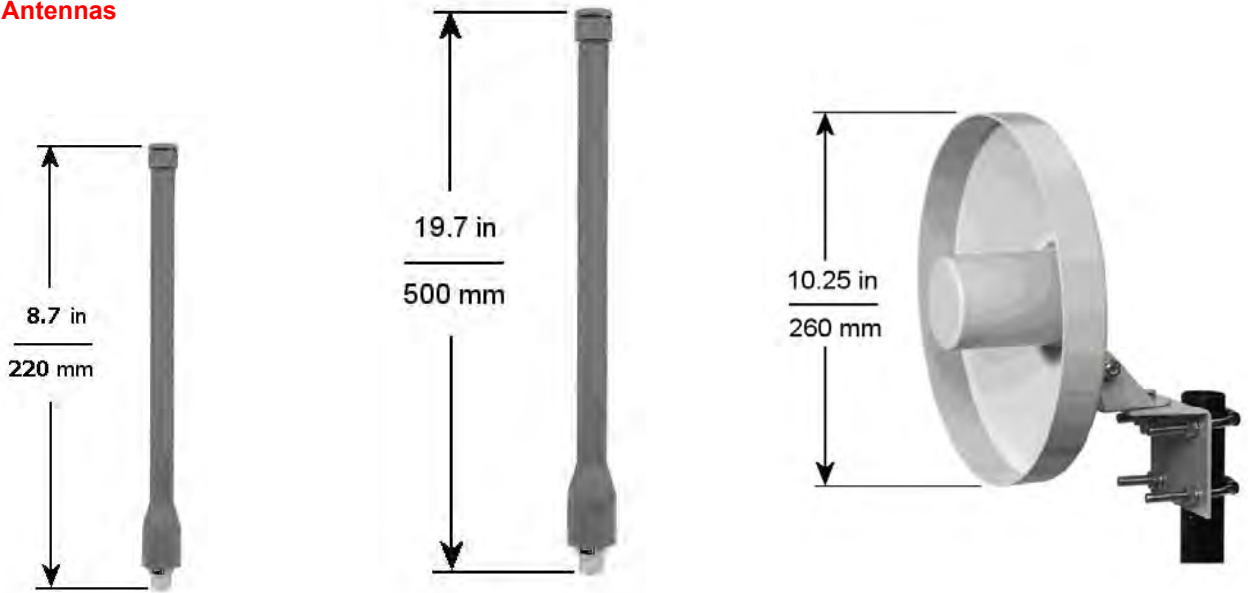
Parameter	Description
Wireless Communication	<p>2,400 to 2,483.5 MHz (2.4 GHz) Industrial, Scientific and Medical (ISM) band</p> <p>DSSS Selection – Discrete Sequential Spread Spectrum per FCC 15.247 / IEEE 802.15.4–2006</p> <p>ISA100.11a Compliant (2.4GHz Direct Sequence Spread Spectrum 802.15.4 DSSS-FH)</p> <p>Every data packet transmitted in either direction is verified (CRC check) and acknowledged by the receiving device.</p> <p>USA – FCC Certified Canada – IC Certified European Union – RTTE/ETSI Conformity Japan – Ministry of Internal Affairs and Communications Certified</p>
ISA100.a RF Transmitter Power (Optional)	<p>NA Selection – 125 mW (20.9 dBm) maximum transmit power not including antenna per FCC/IC, or 400 mW (26.0 dBm) maximum EIRP including antenna for USA and Canadian locations.</p> <p>EU Selection – 100 mW (20.0 dBm) maximum EIRP including antenna per RTTE/ETSI for EU locations.</p>
DSSS RF Transmitter Power	<p>NA Selection – 125 mW (20.9 dBm) maximum transmit power not including antenna per FCC/IC, or 400 mW (26.0 dBm) maximum EIRP including antenna for USA and Canadian locations.</p> <p>EU Selection – 10 mW (10.0 dBm) maximum EIRP including antenna per RTTE/ETSI for EU locations.</p> <p>JP Selection – 12.14 dBm/MHz [32mW (15.14 dbm)] maximum EIRP including antenna for Japanese locations.</p>
Data	<p>PV Publish Cycle Time: Configurable as 1, 5, 10, 30 or 60 seconds</p> <p>Rate: 250 Kbps</p>
Antennas	<p>Integral – 2 dBi omnidirectional monopole</p> <p>Integral – 4 dBi omnidirectional monopole</p> <p>Remote – 8 dBi omnidirectional monopole with up to 20 m cable and lightning surge arrester</p> <p>Remote – 14 dBi directional parabolic with up to 20 m cable and lightning surge arrester.</p>
Signal Range	<p>Nominal 305 m (1,000 feet) between Field Transmitter and Infrastructure Unit (Multinode) or Gateway Unit when using 2 dBi Integral antenna with a clear line of sight.*</p> <p>Two XYR 6000 transmitters both having TX Power set to 16 dBm with a clear line of site nominal signal range is 150 m (490ft.)</p>
Routing vs Non-Routing	<p>Unit can be set as a Field Routing or non-Field Routing device; the number of routing devices is set by the system manager.</p> <p>Using the device as a routing device will impact battery life, the more messages routed through a device, the greater the impact on battery life.</p>

*Actual range will vary depending on antennas, cables and site topography.

Remote Antenna Cables



Remote Antennas



4 dBi Omnidirectional Antenna

8 dBi Omnidirectional Antenna

14 dBi Directional Antenna

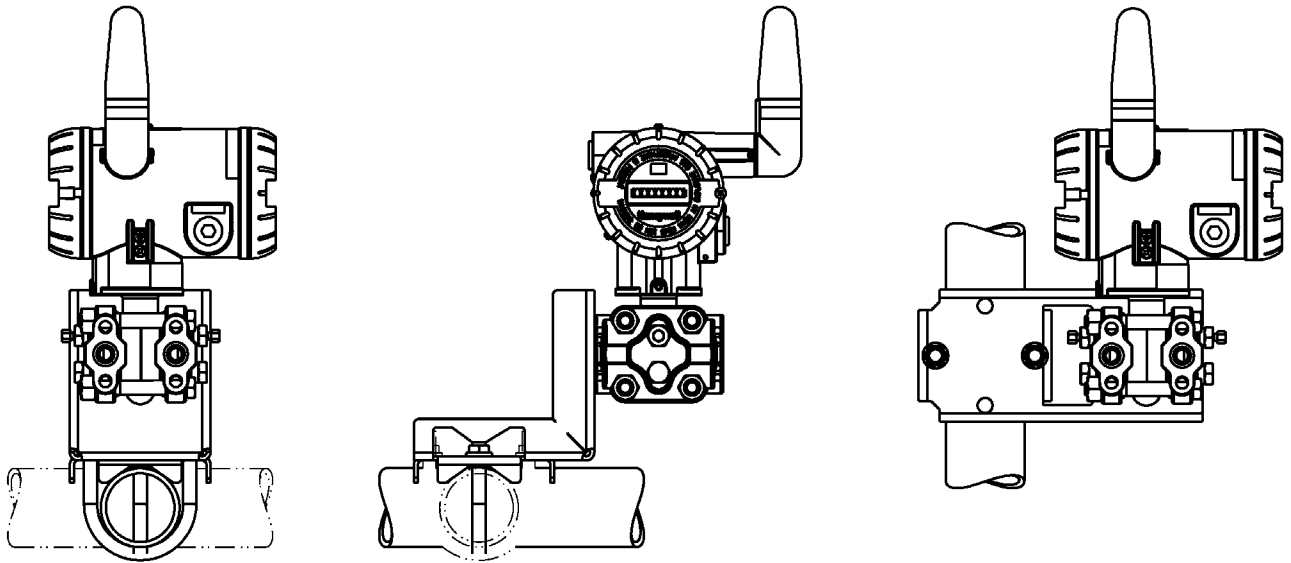


Figure 2 — Examples of typical mounting positions

Dimensions

Reference Dimensions: $\frac{\text{millimeters}}{\text{inches}}$

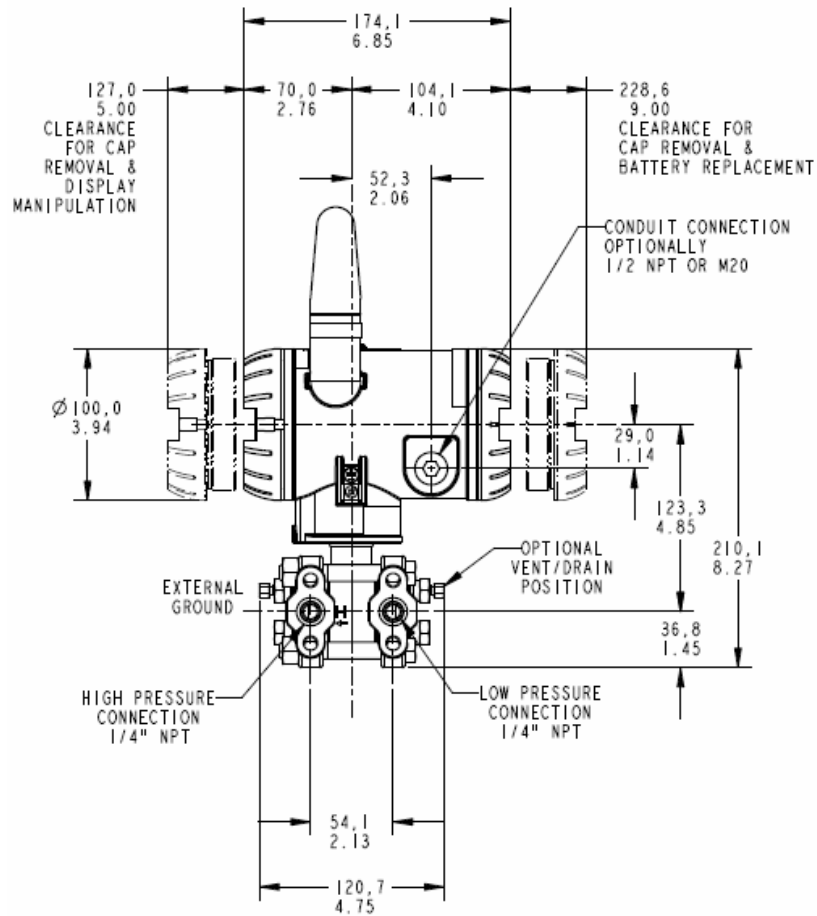


Figure 3 — Typical mounting dimensions for STDW120, STDW130 and STDW170 (side view)

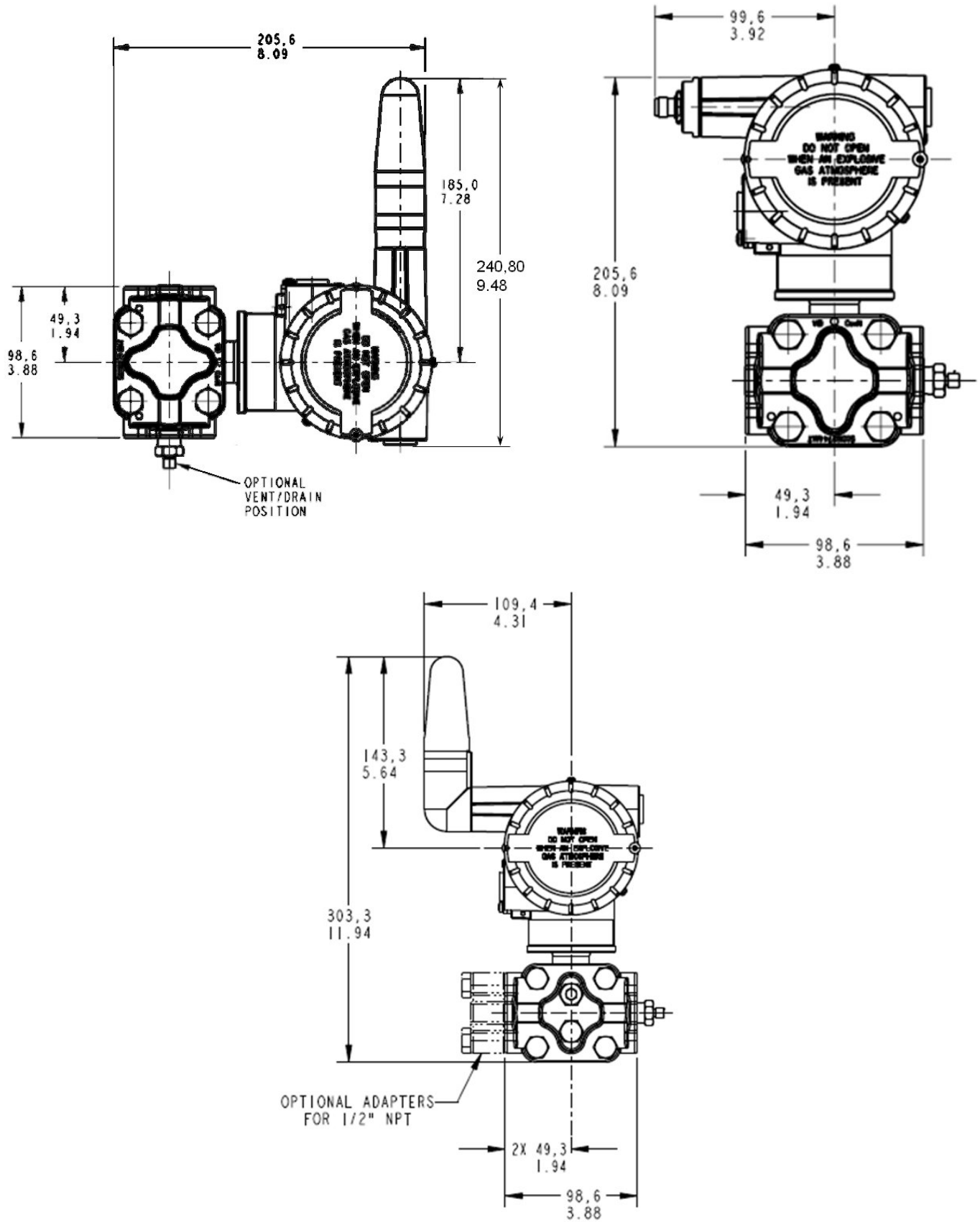


Figure 4 — Typical mounting dimensions for STDW120, STDW130 and STDW170 (rear view)

По вопросам продаж и поддержки обращайтесь:

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
Курган (3522)50-90-47
Курск (4712)77-13-04
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
Новосибирск (383)227-86-73
Ноябрьск(3496)41-32-12

Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Пермь (342)205-81-47
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саранск (8342)22-96-24
Саратов (845)249-38-78
Севастополь (8692)22-31-93
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
Улан-Удэ (3012)59-97-51
Ульяновск (8422)24-23-59
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

сайт: www.honeywell.nt-rt.ru || эл. почта: hwn@nt-rt.ru