

Selection guide

Wireless



Model	WRT10 (Wireless Temperature)
Communications protocols	Wireless BLE 4.0
RF characteristics	2.4 GHz spread spectrum, ISM license-free band 58 mW maximum operational RF transmit power BLE RF link margin: TX Power: +5dBm, RX Sensitivity: -97 dBm
Input types	RTD (Pt100, ASTM A, 4 Wire Thermocouple (Type J))
RTD range	-200 °C to +885 °C
Thermocouple range	-100 mV to +100 mV
Distance to concentrator	15 meters
Housing	Polycarbonate and 300 Series Stainless Steel
Display	Via WiFi Connection on Concentrator
Factory mounted thermowells and sensors	Yes
Sensor construction	Fixed ½" NPT, Spring-Loaded for Thermowell insertion
Configuration	Via WiFi Connection on CC, Web Page
Reporting updates	Selectable between 1 and 60 seconds Shipped at 16 seconds Corresponding to a report rate of 1/30 Hz
Accuracy	±1 °C for 0 °C to 100 °C
Diagnostics	Pairing LEDs, Status, Link, Sensor Type, Update
Battery warranty	10 year battery life per published specification
SIL2 certifications	None
Certifications and approvals	ATEX Intrinsically Safe Certified: II 1 G Ex ia IIC T4 Ga, II 1 D Ex ia IIIC T135 °C Da, -40 °C ≤ Ta ≤ +80 °C, IP54 North America Intrinsically Safe Certified: Canada: Ex ia IIC T4 Ga, Ex ia IIIC T135 °C Da, -40 °C ≤ Ta ≤ +80 °C, IP54 United States: Class I Zone 0 AEx ia IIC T4 Ga, Zone 20 AEx ia IIIC T135 °C Da, -40 °C ≤ Ta ≤ +80 °C, IP54
Specifications	PSS-2A-1B5 A



Model	WGP10 (Wireless Gauge Pressure)	WAP10 (Wireless Absolute Pressure)
Type/design	Gauge pressure in-line	Absolute pressure in-line
Communications protocols	Wireless BLE 4.0	Wireless BLE 4.0
RF characteristics	2.4 GHz spread spectrum, ISM license-free band 58 mW maximum operational RF transmit power BLE RF link margin: TX Power: +5 dBm, RX Sensitivity: -97 dBm	2.4 GHz spread spectrum, ISM license-free band 58 mW maximum operational RF transmit power BLE RF link margin: TX Power: +5 dBm, RX Sensitivity: -97 dBm
Reference accuracy	0.25% of Full Scale, across -40 °C to +80 °C	0.25% of Full Scale, across -40 °C to +80 °C
Distance to concentrator	15 meters	15 meters
Reporting updates	Selectable between 1 and 60 seconds Shipped at 16 seconds Corresponding to a report rate of 1/30 Hz	Selectable between 1 and 60 seconds Shipped at 16 seconds Corresponding to a report rate of 1/30 Hz
Upper range limits	0.21 MPa, 30 psi, 2.1 bar or kg/cm2 2.1 MPa, 300 psi, 21 bar or kg/cm2 7 MPa, 1000 psi, 70 bar or kg/cm2	0.21 MPa, 30 psia, 2.1 bar or kg/cm2
Temperature range	-40° and +80° C; -40° and +176 °F	-40° and +80° C; -40° and +176 °F
Fill fluid	Silicone Oil	N/A
Process temperature range	-46 °C to +121 °C, -51 °F to +250 °F	-46 °C to +121 °C, -51 °F to +250 °F
Process wetted materials	316L SS	N/A
Process connections	N/A	None, (Both covers tapped for ½ NPT) ¼” NPT, ½” NPT
Ingress protection rating	IP54 as defined by IEC60529	IP54 as defined by IEC60529
Housing	Polycarbonate and 300 Series Stainless Steel	Polycarbonate and 300 Series Stainless Steel
Vibration specification	1G constant acceleration input over a frequency range of 5 to 200 Hz	N/A
Certifications and approvals	ATEX Intrinsically Safe Certified:II 1 G Ex ia IIC T4 Ga, II 1 D Ex ia IIIC T135 °C Da, -40 °C ≤ Ta ≤ +80 °C, IP54; North America Intrinsically Safe Certified: Canada: Ex ia IIC T4 Ga, Ex ia IIIC T135 °C Da, -40 °C ≤ Ta ≤ +80 °C, IP54; United States: Class I Zone 0 AEx ia IIC T4 Ga, Zone 20 AEx ia IIIC T135°C Da, -40 °C ≤ Ta ≤ +80 °C, IP54	ATEX Intrinsically Safe Certified:II 1 G Ex ia IIC T4 Ga, II 1 D Ex ia IIIC T135 °C Da, -40 °C ≤ Ta ≤ +80 °C, IP54; North America Intrinsically Safe Certified: Canada: Ex ia IIC T4 Ga, Ex ia IIIC T135 °C Da, -40 °C ≤ Ta ≤ +80 °C, IP54; United States: Class I Zone 0 AEx ia IIC T4 Ga, Zone 20 AEx ia IIIC T135 °C Da, -40 °C ≤ Ta ≤ +80 °C, IP54
Battery warranty	10 year battery life per published specification	10 year battery life per published specification
Calibration certificate	Embedded in end node memory Accessed via WiFi on CC	Embedded in end node memory Accessed via WiFi on CC
Remote seals and closed-coupled seals	Yes	Yes
Diagnostics	Pairing LEDs, status, link, sensor type, update	Pairing LEDs, status, link, sensor type, update
Configuration	Via WiFi Connection on CC Web Page	Via WiFi Connection on CC Web Page
Specifications	PSS-2A-1B5 A	PSS-2A-1B5 A



Model	WDP10 (Wireless Differential Pressure)
Type/design	Differential pressure
Communications protocols	Wireless BLE 4.0
RF characteristics	2.4 GHz spread spectrum, ISM license-free band 58 mW maximum operational RF transmit power BLE RF link margin: TX Power: +5dBm, RX Sensitivity: -97 dBm
Reference accuracy	0.25% of full scale, across -40 °C to +80 °C
Distance to concentrator	15 meters
Reporting updates	Selectable between 1 and 60 seconds Shipped at 16 seconds Corresponding to a report rate of 1/30 Hz
Upper range limits	50 kPa, 200 inH2O, 500 mbar 210 kPa, 30 psi, 2100 mbar 2.1 Mpa, 300 psi, 21 bar
Temperature range	-40° and +80 °C, -40° and +176 °F
Process temperature range	-46 °C to +121 °C, -51 °F to +250 °F
Ingress protection rating	IP54 as defined by IEC60529
Housing	Polycarbonate and 300 Series Stainless Steel
Certifications and approvals	ATEX Intrinsically Safe Certified:II 1 G Ex ia IIC T4 Ga, II 1 D Ex ia IIIC T135 °C Da, -40 °C ≤ Ta ≤ +80 °C, IP54 North America Intrinsically Safe Certified: Canada: Ex ia IIC T4 Ga, Ex ia IIIC T135 °C Da, -40 °C ≤ Ta ≤ +80 °C, IP54 United States: Class I Zone 0 AEx ia IIC T4 Ga, Zone 20 AEx ia IIIC T135 °C Da, -40 °C ≤ Ta ≤ +80 °C, IP54
Battery warranty	10 year battery life per published specification
Calibration certificate	Embedded in end node memory, accessed via WiFi on CC
Remote seals and closed-coupled seals	Yes
Diagnostics	Pairing LEDs, status, link, sensor type, update
Configuration	Via WiFi connection on CC web page
Specifications	PSS-2A-1B5 A



Model	WCC10
Communications protocols	BLE 4.0 to wireless HART central concentrator (CC)
End node capacity	8
Distance from end node to concentrator	15 meters
Distance from concentrator to wireless HART gateway	50+ meters
RF characteristics	2.4 GHz spread spectrum, ISM license-free band 58 mW maximum operational RF transmit power BLE RF link margin: TX Power: +5 dBm, RX Sensitivity: -97 dBm WiFi: TX Power: +15 dBm, RX Sensitivity: -90 dBm WHART: TX Power: +10 dBm, RX Sensitivity: -96 dBm
Housing	Polycarbonate and 300 Series Stainless Steel
Diagnostics	Pairing LEDs, status, link, sensor type, update
Configuration	Via WiFi connection on CC web page
Display	WiFi connection to smartphone or tablet web page Displays end nodes for push/flash OEM tag Short tag and long tag Software version Status and link Sensor type Period Measurement Engineering units Zero function
Battery warranty	5 year battery life per published specification