

**WTS 1200 STANDARD PRECISION LOWPROFILE™ WIRELESS LOAD CELL (U.S. & METRIC)**

**FEATURES & BENEFITS**

- Capacities from 300 to 100K lbf (1.5 to 450 kN)
- Proprietary Interface temperature compensated strain gages
- Performance to 0.0425%
- 2.4 GHZ transceiver
- Eccentric load compensated
- Low deflection
- Barometric compensation
- Tension and compression
- Compact size

**OPTIONS**

- Base (recommended)
- Standardized output
- Custom calibration
- Multiple bridge
- Special threads
- Dual diaphragm

**COMPATIBLE WITH**



**Model WTS-BS-1-HA (Shown)**

**STANDARD CONFIGURATION**



**Model 1220WTS-50K (Shown)**

**TRANSCEIVER SPECIFICATIONS**

MEASUREMENT SPECIFICATIONS		
Strain Gauge Excitation System	4-wire	
Strain Gauge Excitation – VDC	3	
Strain Gauge Resistance (min) – Ω	85	
Strain Gauge Sensitivity (max) – mV/V	±4.5	
Offset Temperature Stability (max) – ppm/°C	4	
Gain Temperature Stability (max) – ppm/°C	5	
Nonlinearity Before Linearization (max) – ppm of FR	25	
Internal Resolution/Bits	16,000,000 / 24	
Noise Free Resolution at 1 Sample Per Second	400,000 / 18.75	
Transmission Rates – ms to day	From 5 to 1	
BATTERY LIFE		
Battery	2 x AAA Alkaline	
Battery Life – hrs	300 typically	
RADIO		
Radio Type	License exempt transceiver	
Radio Frequency – GHz	2.4	
Transmit Power – mW	10	
Range	m	Up to 610
	ft	Up to 2,000
ENVIRONMENTAL		
Operating Temperature Range	°C	-20 to 55
	°F	-4 to 131
Storage Temperature Range (no batteries)	°C	-40 to 85
	°F	-40 to 185
Maximum Humidity – %	95 non-condensing	
IP Rating (WTS-AM-1 & WTS-AM-1-D)	IP67/Nema4	
Telemetry Housing	Polyamide resin	
Material	Heat Treated Steel or Stainless Steel	

1200WTS v1.4 01-27-2021

International System of Units (SI) dimensions and capacities are provided for conversion only. Standard products have U.S. capacities and dimensions. SI capacities available upon special request and at an additional cost.

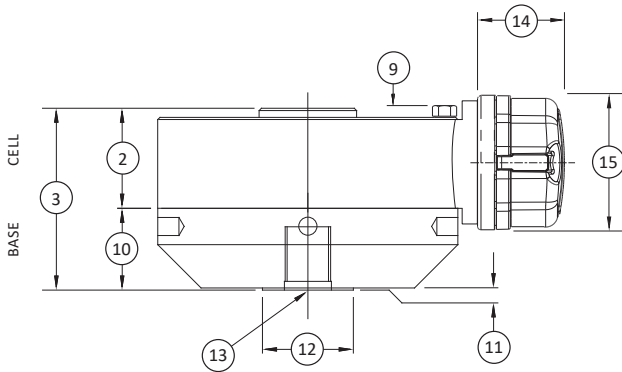
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**LOAD CELL SPECIFICATIONS**

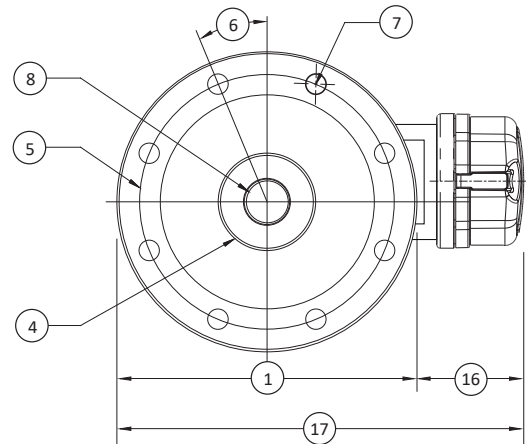
PARAMETERS		MODEL			
		1210	1210	1220	1232
		CAPACITY			
Measuring Range	U.S. (lbf)	300, 500 1K, 2K	5K, 10K	25K, 50K	100K
	Metric (kN)	1.5, 2.5, 5, 10	25, 50	100, 250	450
<b>ACCURACY – (MAX ERROR)</b>					
Static Error Band – %FS		±0.04	±0.04	±0.04	±0.06
Nonlinearity – %FS		±0.04	±0.04	±0.04	±0.05
Hysteresis – %FS		±0.03	±0.04	±0.05	±0.06
Nonrepeatability – %RO		±0.01	±0.01	±0.01	±0.01
Creep, in 20 min – %		±0.025	±0.025	±0.025	±0.025
Side Load Sensitivity – %		±0.25	±0.25	±0.25	±0.25
Eccentric Load Sensitivity – % / in		±0.25	±0.25	±0.25	±0.25
<b>TEMPERATURE</b>					
Compensated Range	°F	+15 to +115	+15 to +115	+15 to +115	+15 to +115
	°C	-10 to +45	-10 to +45	-10 to +45	-10 to +45
Operating Range *	°F	* Please reference Transceiver Operating Temperature Range			
	°C				
Effect on Zero – %RO / deg	°F	±0.0008	±0.0008	±0.0008	±0.0008
	°C	±0.0015	±0.0015	±0.0015	±0.0015
Effect on Output – % / deg	°F	±0.0008	±0.0008	±0.0008	±0.0008
	°C	±0.0015	±0.0015	±0.0015	±0.0015
<b>ELECTRICAL</b>					
Rated Output – mV/V (Nominal)		2.0	4.0	4.0	4.0
Excitation Voltage – VDC MAX		20	20	20	20
Bridge Resistance – Ohm (Nominal)		350	350	350	350
Zero Balance – %RO		±1.0	±1.0	±1.0	±1.0
Insulation Resistance – Megohm		5000	5000	5000	5000
<b>MECHANICAL</b>					
Safe Overload – %CAP		±150	±150	±150	±150
Deflection @ RO	in	0.001	0.002	0.002	0.003
	mm	0.03	0.05	0.05	0.08
Optional Base – P/N (Metric)		B101 (M)	B102 (M)	B103 (M)	B112 (M)
Natural Frequency – kHz		3.9, 5.0, 6.9, 9.8	6.6, 9.4	6.5, 7.0	5.8
Weight	lbs	1.5	3.3	9.5	26
	kg	0.7	1.5	4.3	11.8
Calibration		Tension & Compression			
Material		Aluminum	Alloy Steel		

**WTS 1200 STANDARD PRECISION LOWPROFILE™ WIRELESS LOAD CELL (U.S. & METRIC)**

SIDE VIEW



TOP VIEW



**DIMENSIONS**

See Drawing	MODEL					
	1210		1220		1232	
	CAPACITY					
	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)	U.S. (lbf)	Metric (kN)
	300, 500, 1K, 2K, 5K, 10K,	1.5, 2.5, 5, 10, 25, 50	25K, 50K	100, 250	100K	450
in	mm	in	mm	in	mm	
(1)	Ø4.13	Ø104.8	Ø6.06	Ø153.9	Ø8.00	Ø203.2
(2)	1.38	34.9	1.75	44.5	2.50	63.5
(3)	2.51	63.5	3.5	89.0	4.5	114.3
(4)	Ø1.34	Ø34.0	Ø2.65	Ø67.3	Ø3.76	Ø95.2
(5)	Ø3.50	Ø88.9	Ø5.13	Ø130.3	Ø6.50	Ø165.1
(6)	22.5°	22.5°	15.0°	15.0°	11.25°	11.25°
(7)	Ø0.28	Ø7.1	Ø0.41	Ø10.4	Ø0.53	Ø13.5
(8)	8 places		12 places		16 places	
(8)	¼-18 UNF-3B ↓ 1.12	M16 x 2-4H ↓ 28.4	1 ¼-12 UNF-3B ↓ 1.40	M33 x 2-4H ↓ 35.6	1 ¼-12 UN-3B ↓ 2.15	M42 x 2-4H ↓ 54.6
(9)	0.20	5.10	0.30	7.60	0.40	10.2
(10)	1.13	28.6	1.75	44.5	2.00	50.8
(11)	0.03	0.8	0.03	0.8	0.03	0.8
(12)	Ø1.25	Ø31.8	Ø2.25	Ø57.2	Ø3.00	Ø76.2
(13)	¼-18 UNF-3B ↓ 0.87	M16 x 2-4H ↓ 22.1	1 ¼-12 UNF-3B ↓ 1.40	M33 x 2-4H ↓ 35.6	1 ¼-12 UNF-3B ↓ 1.75	M42 x 2-4H ↓ 44.5
(14)	2.0	50.5	2.0	50.5	2.0	50.5
(15)	Ø3.1	Ø78	Ø3.1	Ø78	Ø3.1	Ø78
(16)	2.5	63.5	2.5	63.5	2.5	63.5
(17)	6.63	168.4	8.56	217.4	10.5	266.7