

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)

TRANSCIEVER 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	

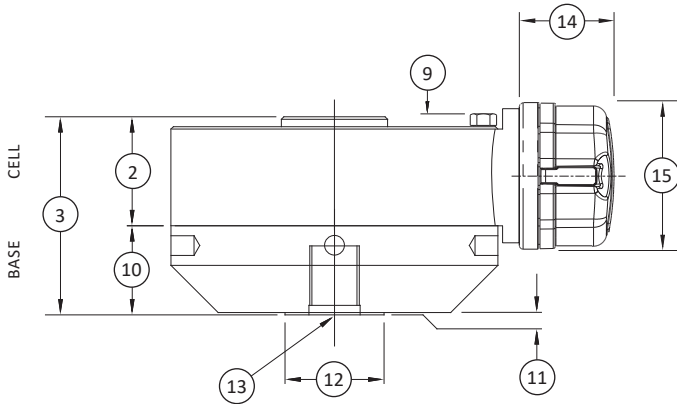
WTS 1200 STANDARD PRECISION LOWPROFILE™ WIRELESS LOAD CELL (U.S. & METRIC)

LOAD CELL SPECIFICATIONS

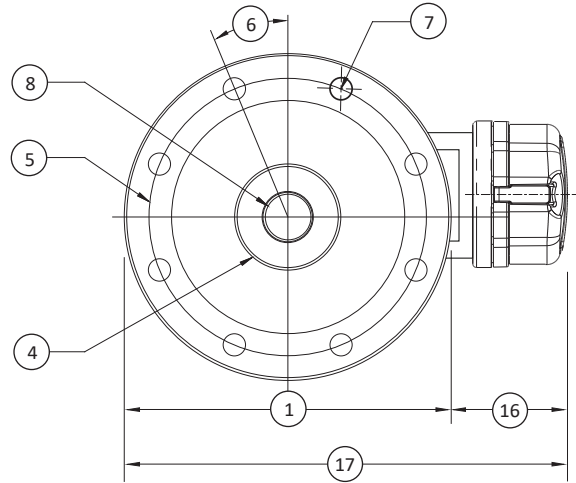
PARAMETERS		MODEL				
		1210	1210	1220	1232	
		CAPACITY				
Measuring Range	U.S. (lbf)	300, 500 1K, 2K	5K, 10K	15K, 20K, 25K, 50K	100K	
	Metric (kN)	1.5, 2.5, 5, 10	25, 50	66.7, 89, 100, 250	450	
ACCURACY – (MAX ERROR)						
Static Error Band – %FS		±0.04	±0.04	±0.04	±0.06	
Nonlinearity – %FS		±0.04	±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	
TEMPERATURE						
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
ELECTRICAL						
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	
MECHANICAL						
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	15K, 20K, 25K, 50K	66.7, 89, 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	
(9)	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
(10)	0.20	5.10	0.30	7.60	0.40	10.2
(11)	1.13	28.6	1.75	44.5	2.00	50.8
(12)	0.03	0.8	0.03	0.8	0.03	0.8
(13)	Ø1.25	Ø31.8	Ø2.25	Ø57.2	Ø3.00	Ø76.2
(14)	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
(15)	2.0	50.5	2.0	50.5	2.0	50.5
(16)	Ø3.1	Ø78	Ø3.1	Ø78	Ø3.1	Ø78
(17)	2.5	63.5	2.5	63.5	2.5	63.5
(18)	6.63	168.4	8.56	217.4	10.5	266.7