



Price List

Item No.	Description	Range	Accuracy / Uncertainty	Price (THB)	Remark	Code
Calibration Fee						
Acoustics and Vibration Metrology						
1	Measurement Microphone type LS1P by the reciprocity technique (Pressure sensitivity level)	20 Hz to 10 kHz	0.040 dB to 0.070 dB	10,630/piece		14010 - 11101
2	Measurement Microphone type LS2P by the reciprocity technique (Pressure sensitivity level)	20 Hz to 20 kHz	0.040 dB to 0.10 dB	10,630/piece		14010 - 11102
3	Measurement Microphone by the insert voltage technique (pressure sensitivity level)	250 Hz and 1 kHz	0.10 dB	5,130/piece		14010 - 11103
4	Measurement Microphone by the comparison method (free-field sensitivity level)	31.5 Hz to 16 kHz 84 dB	0.30 dB to 0.40 dB	7,880/piece		14010 - 11201
5	Measurement Microphone type WS2 by the insert voltage technique (microphone sensitivity) and by The electrostatic actuator (frequency response)	20 Hz to 20 kHz	Sensitivity : 0.10 dB Frequency Response : 0.10 to 0.30 dB	7,500/piece		14010 - 11202
6	Pistonphone or Sound Calibrator	74 dB to 124 dB 250 Hz, 1kHz	0.060 dB	4,880 first level 1,000 /next level		14010 - 12101
7	Multifunction Acoustic Calibrator or Multi-frequency Sound Calibrator	74 dB to 124 dB 31.5 Hz to 16 kHz	0.080 dB to 0.140 dB	16,880/piece		14010 - 12201
8	Sound Level Meter	Based on IEC 61672 Part 3	Class 1, 2	10,880/piece		14010 - 13101
9	Sound Level Meter (Free-field sound pressure response level and absolute sensitivity)	31.5 Hz to 16 kHz 84 dB	0.020 dB to 0.40 dB	7,880/piece		14010 - 13201
10	Sound exposure meter or Noise Dose Meter	63 Hz to 8 kHz	Class 1, 2	17,500/piece		14010-13301
11	Pure-tone audiometer with supra-aural earphone	125 Hz - 8 kHz	Type 1, 2, 3 and 4	7,500/piece		14010 - 14101
12	Pure-tone audiometer with circumaural earphone	125 Hz - 8 kHz	Type 1, 2, 3 and 4	7,500/piece		14010 - 14201
13	Octave Band Pass Filter	20 Hz - 20 kHz	Class 1, 2	7,500/piece		14010 - 17101



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14	Sound Absorption Coefficients of Materials for low frequency	50 Hz - 1.6 kHz	3.8 %	5,000/piece		14010 - 67001
15	Sound Absorption Coefficients of Materials for high frequency	500 Hz - 6.4 kHz	3.8 %	5,000/piece		14010 - 67002
16	Sound Transmission Loss of Materials	50 Hz - 6.4 kHz	3.8%	8,750/piece		14010-67003
17	Tuning Fork	500 Hz - 5 kHz	0.8 Hz	3,125/piece		14010-67101
18	Vibration Meter	1 m/s ² to 100 m/s ² 40 Hz to 5 kHz	1.0 %	10,000/piece		14020 - 11101
19	Vibration Meter	1 Hz to 160 Hz	2 % for velocity in vertical and horizontal vibration directions	10,000/piece		14020 - 11102
20	Vibration Meter for Low frequency by comparison with standard accelerometer.	1 m/s ² to 100 m/s ² 10 Hz to 5kHz	1.0%	15,000/piece		14020-11103
21	Vibration Calibrator	1 m/s ² to 100 m/s ² 40 Hz to 5 kHz	1.0 %	5,000 first point 1,250/next point		14020 - 12101
22	Accelerometer by Laser Interferometry (charge sensitivity)	10 m/s ² to 200 m/s ² 40 Hz to 800 Hz	0.50 %	13,750/piece		14020 - 13101
		10 m/s ² to 370 m/s ² > 800 Hz to 5 kHz	0.80 %			
23	Accelerometer by comparison to reference transducer (Charge sensitivity)	1 m/s ² to 100 m/s ² 40 Hz to 5 kHz	1.0%	8,750 first point 1,250/next point		14020 - 13102
24	Shock Transducer by Laser interferometry	20 g to 500 g	1.0%	11,250 /piece		14020 - 13201
25	Accelerometer by Laser Interferometry (voltage sensitivity)	10 m/s ² to 200 m/s ² 40 Hz to 800 Hz	0.50 %	13,750/piece		14020-13301
		10 m/s ² to 370 m/s ² > 800 Hz to 5 kHz	0.80 %			

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26	Accelerometer by Laser Interferometry (Voltage sensitivity in modulus)	0.3 m/s ² to 10 m/s ² 1 Hz to 160 Hz	1.0%	13,000/piece		14020-13302
27	Accelerometer by Laser Interferometry (Phase shift of Voltage transducer type)	0.3 m/s ² to 10 m/s ² 1 Hz to 160 Hz	1.0 degree	13,000/piece		14020-13303
28	Accelerometer by Laser Interferometry (Voltage sensitivity in modulus with Phase shift)	0.3 m/s ² to 10 m/s ² 1 Hz to 160 Hz	1.0% and 1.0 degree	15,000/piece		14020-13304
29	Accelerometer by comparison to reference transducer (voltage sensitivity)	0.3 m/s ² to 10 m/s ² 1 Hz to 80Hz	1.0%	8,750/piece		14020-13305
30	Accelerometer by comparison to reference transducer (voltage sensitivity)	1 m/s ² to 100 m/s ² 40 Hz to 5 kHz	1.0%	10,000/piece		14020-13306
31	Laser Vibrometer by comparison to reference vibrometer (modulus)	10 m/s ² to 50 m/s ² 40 Hz to 5 kHz	0.50%	50,000/piece		14020-13401
32	Laser Vibrometer	20 kHz	3.50%	4,375/point		14020-18101
33	Tachometer (Beam of infrared LED technique)	900 RPM to 99,000 RPM	1.0%	5,000/piece		14020 - 18102
34	Stroboscope	210 RPM to 7500 RPM	1.0%	5,000/piece		14020 - 18103
35	Displacement (Unloaded scaler), Frequency (Dental scaler)	0.1 μm to 220.0 μm.	5.0%	11,250/piece		14020-18104
		18 kHz to 20 kHz	2.0%			
36	Conditioning Amplifier (Charge Amplifier)	20 Hz to 7 kHz	0.10 %	5,380/piece		14020 - 19101
37	Conditioning Amplifier (Voltage Amplifier)	40 Hz to 5 kHz	0.10 %	6,250/piece		14020 - 19102
38	Conditioning Amplifier (ICP Amplifier)	40 Hz to 5 kHz	0.10%	6,250/piece		14020 - 19103
39	Ultrasound Power Meter (ultrasound power-ultrasound power meter)	0.5 W to 10 W 1 MHz	6.0%	10,000/piece		14030 - 11101
		0.5 W to 4 W 3 MHz	7.0%			
		0.5 W to 2 W 5 MHz	8.0%			



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40	Ultrasonic Transducer (ultrasonic transducer and generator)	0.5 W to 10 W 1 MHz	6.0 %	12,500/piece		14030 - 11102
		0.5 W to 4 W 3 MHz	7.0%			
		0.5 W to 2 W 5 MHz	7.0%			
41	Immersion Ultrasonic Transducer (Planar Scanning Method)	1 MHz to 15 MHz 50 kPa to <20 Mpa	14.40 % to 15.30 %	7,500/piece		14030-13101
42	Ultrasonic Sonic Monitor	0.5 W to 10 W 1 MHz	14%	5,625/piece		14030-14101
		0.5 W to 4 W 3 MHz				
		0.5 W to 2 W 5 MHz				
43	Ultrasonic Power (Therapeutic Ultrasound) - Onsite Service	0.5 W to 10 W 1 MHz to 3 MHz	5.0%	3,000/piece		14030-15101
44	Ultrasonic Processor	40 Hz to 300 kHz Amplitude Displacement [μ m- p]	1.5% for Frequency 4.5% for Displacement	15,000/piece		14030-19101
45	Ultrasound Check Source	10 mW, 100 mW and 1 W 3.5 MHz	6.0 %	10,000/piece		14033-13111
46	Needle hydrophone (free-field sensitivity - hydrophone)	1 MHz to 15 MHz 50 kPa to <20 Mpa	14.0 % to 15.0 %	24,375/piece		14033-11101
47	Ultrasound transducer for physiotherapy (Planar Scanning Method)	1 MHz , 3 MHz 50 kPa to <20 MPa	17.0 %	7,500/point		14033-63301



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48	Electrical Safety Test - Based On IEC 60601-1	Acceptance Test for Medical Electrical Equipment and Systems	Mains Voltage: 6 V Equipment Current: 2.5 A Protective Earth Resistance: 0.02 Ohm Insulation Resistance: 11 MOhm Earth Leakage Current: 1.5 uAAC+DC Enclosure Leakage Current: 1.5 uAAC+DC	5,625/piece		14030-67001
49	Adjustment Charge			25 % of the calibration cost of each range		14000 - 10001