



National Accreditation Board for Testing and Calibration Laboratories

(A Constituent Board of Quality Council of India)



SCOPE OF ACCREDITATION

Laboratory Name ACOUSTIC TEST FACILITY OF NATIONAL INSTITUTE OF OCEAN TECHNOLOGY, PALLIKARANAI, CHENNAI, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-5909 Page No. : 1 / 2

Validity 24/05/2019 to 23/05/2021 Last Amended on 29/05/2019

S.No	Discipline / Group	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing/ Limits of Detection
Permanent Facility					
1	ELECTRONICS-MISCELLANEOUS PRODUCTS	Underwater Acoustic transducers, Hydrophones, staves	Acoustic source level (1kHz to 100kHz)	ATF-QP-7200-2: 2000	150 dB re 1μPa.m to 215 dB re 1μPa.m
2	ELECTRONICS-MISCELLANEOUS PRODUCTS	Underwater Acoustic transducers, Hydrophones, staves	Conductance (1 kHz to 500 kHz)	ATF-QP-7200-2: 2000	0.001 ms to 200 ms
3	ELECTRONICS-MISCELLANEOUS PRODUCTS	Underwater Acoustic transducers, Hydrophones, staves	Directivity (1 kHz to 100 kHz)	ANSI / ASA S1.20: 2012	0 ° to 360 °
4	ELECTRONICS-MISCELLANEOUS PRODUCTS	Underwater Acoustic transducers, Hydrophones, staves	Electrical Power output (1kHz to 25kHz)	ANSI / ASA S1.20: 2012	1 VA to 3000 VA
5	ELECTRONICS-MISCELLANEOUS PRODUCTS	Underwater Acoustic transducers, Hydrophones, staves	Phase (1 kHz to 500 kHz)	ATF-QP-7200-2: 2000	-90 ° to 90 °
6	ELECTRONICS-MISCELLANEOUS PRODUCTS	Underwater Acoustic transducers, Hydrophones, staves	Receiving Sensitivity - Free field comparison Calibration (1 kHz to 10 kHz)	IEC: 60565: Edition 2.0: 2006	-220 dB re V/μPa to -150 dB re V/μPa
7	ELECTRONICS-MISCELLANEOUS PRODUCTS	Underwater Acoustic transducers, Hydrophones, staves	Receiving Sensitivity- Free field comparison calibration (>100 kHz to 500 kHz)	IEC: 60565: Edition 2.0: 2006	-232 dB re V/μPa to -150 dB re V/μPa
8	ELECTRONICS-MISCELLANEOUS PRODUCTS	Underwater Acoustic transducers, Hydrophones, staves	Receiving Sensitivity- Free field comparison calibration (>10kHz to 100 kHz)	IEC: 60565: Edition 2.0: 2006	-220 dB re V/μPa to -150 dB re V/μPa



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9	ELECTRONICS- MISCELLANEOUS PRODUCTS	Underwater Acoustic transducers, Hydrophones, staves	Susceptance (1 kHz to 500 kHz)	ATF-QP-7200-2: 2000	-200 ms to 200 ms
10	ELECTRONICS- MISCELLANEOUS PRODUCTS	Underwater Acoustic transducers, Hydrophones, staves	Transmitting Voltage Response - Free field comparison calibration (1 kHz to 10 kHz)	IEC: 60565: Edition 2.0: 2006	70 dB re $\mu\text{Pa.m/V}$ to 210 dB re $\mu\text{Pa.m/V}$
11	ELECTRONICS- MISCELLANEOUS PRODUCTS	Underwater Acoustic transducers, Hydrophones, staves	Transmitting Voltage Response - Free field comparison calibration (>10 kHz to 100 kHz)	IEC: 60565: Edition 2.0: 2006	70 dB re $\mu\text{Pa.m/V}$ to 210 dB re $\mu\text{Pa.m/V}$
12	ELECTRONICS- MISCELLANEOUS PRODUCTS	Underwater Acoustic transducers, Hydrophones, staves	Transmitting Voltage Response -Free field comparison calibration (>100 kHz to 500 kHz)	IEC: 60565: Edition 2.0: 2006	70 dB re $\mu\text{Pa.m/V}$ to 210 dB re $\mu\text{Pa.m/V}$
13	ELECTRONICS- MISCELLANEOUS PRODUCTS	Underwater Acoustic transducers, Hydrophones, staves	Impedance (1 kHz to 500 kHz)	ANSI / ASA S1.20: 2012	1 ohm to 200 ohm