

CERTIFICATE OF ACCREDITATION

RFCOMM CALIBRATION LABORATORY, RFCOMM SOLUTIONS & SERVICES PVT. LTD.

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2017

"General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at

G 06, 6TH FLOORNO 02, JAIN HEIGHTS SOLUS 1ST CROSS, J C ROAD, BENGALURU, BENGALURU URBAN, KARNATAKA, INDIA

in the field of

CALIBRATION

Certificate Number:

CC-2801

Issue Date:

13/08/2022

• NDIA • S³ Valid Until:

12/08/2024

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL. (To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Name of Legal Identity : RFCOMM SOLUTIONS & SERVICES PRIVATE LIMITED

Signed for and on behalf of NABL



N. Venkateswaran Chief Executive Officer





SCOPE OF ACCREDITATION

Laboratory Name :

RFCOMM CALIBRATION LABORATORY, RFCOMM SOLUTIONS & SERVICES PVT. LTD., G 06, 6TH FLOOR NO 02, JAIN HEIGHTS SOLUS 1ST CROSS, J C ROAD, BENGALURU, BENGALURU URBAN, KARNATAKA, INDIA

Accreditation Standard Certificate Number Validity ISO/IEC 17025:2017

CC-2801

13/08/2022 to 12/08/2024

Page No 1 of 8 Last Amended on -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
		1.0	Permanent Facility		
1	ELECTRO- TECHNICAL- DIRECT CURRENT (Measure)	DC Current	Using 6.1/2 Digit multimeter by Direct Method	100 mA to 3 A	0.088 % to 0.26 %
2	ELECTRO- TECHNICAL- DIRECT CURRENT (Measure)	DC Current	Using 6 1/2 Digit multimeter and DC Power Supply By Comparison Method	100 mA to 3 A	0.58 % to 0.66 %
3	ELECTRO- TECHNICAL- RF/MICROWAV E (1 GHZ AND ABOVE) (Measure)	AC Voltage at 1 kHz to 100 kHz	Using 6 1/2 Digit multimeter by Direct Method	20 mV to 5V	0.28 % to 5.19 %
4	ELECTRO- TECHNICAL- RF/MICROWAV E (1 GHZ AND ABOVE) (Measure)	AC Voltage at 1kHz to 100 kHz	Using 6 1/2 Digit multimeter and Arbitrary waveform generator by comparison method	20 mV to 5V	5.20 % to 5.33 %
5	ELECTRO- TECHNICAL- RF/MICROWAV E (1 GHZ AND ABOVE) (Measure)	Amplitude Modulation at (Rate: 1kHz to 10 kHz)	Using Modulation Meter by Direct Method	Depth 10% to 80% , CW 10MHz to 1.3GHz	1.97 % to 2.36 %





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CC-2801

13/08/2022 to 12/08/2024

Page No2 of 8Last Amended on-

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6	ELECTRO- TECHNICAL- RF/MICROWAV E (1 GHZ AND ABOVE) (Measure)	DC Voltage	Using 6 1/2 Digit multimeter by Direct Method	1 V to 650 V	0.06 % to 5.78 %
7	ELECTRO- TECHNICAL- RF/MICROWAV E (1 GHZ AND ABOVE) (Measure)	DC Voltage	Using DC Power supply & Power Supply and 6 1/2 Digit multimeter by Comparison Method	1 V to 650 V	0.17 % to 5.78 %
8	ELECTRO- TECHNICAL- RF/MICROWAV E (1 GHZ AND ABOVE) (Measure)	Frequency	Using Universal frequency counter & High Frequency Counters Locked with Frequency Standard by Direct Method	1 Hz to 40 GHz	26.6 µHz to 57.8 Hz
9	ELECTRO- TECHNICAL- RF/MICROWAV E (1 GHZ AND ABOVE) (Measure)	Frequency Modulation at (Rate 1 kHz to 20 kHz)	Using Modulation Meter by Direct Method	Deviation 1kHz to 200kHz, CW: 10MHz to 1.3GHz	2.30 % to 2.0 %
10	ELECTRO- TECHNICAL- RF/MICROWAV E (1 GHZ AND ABOVE) (Measure)	RF Power at (50 MHz to 40 GHz)	Using High Power Sensor and Power Meter with Sensor & Signal Analyzer by Direct &Transfer Method	-60 dBm to 13 dBm	5 % to 9.80 %





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13/08/2022 to 12/08/2024

Page No3 of 8Last Amended on-

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11	ELECTRO- TECHNICAL- RF/MICROWAV E (1 GHZ AND ABOVE) (Source)	Amplitude Modulation at (Rate:1 kHz to 10 kHz)	Using Analog signal generator by Direct Method	Depth 10% to 80% to CW:10 MHz to 1.3 GHz	3.3%
12	ELECTRO- TECHNICAL- RF/MICROWAV E (1 GHZ AND ABOVE) (Source)	Frequency	Using By Arbitrary waveform generator and Analog signal generator and Digital signal generator with Reference Locked to Frequency Standard by Direct Method	1 Hz to 40 GHz	0.67 Hz to 6.05 Hz
13	ELECTRO- TECHNICAL- RF/MICROWAV E (1 GHZ AND ABOVE) (Source)	Frequency Modulation at (Rate:2 kHz to 20 kHz)	Using analog signal generator & Digital Signal Generator By Direct Method	Deviation 10 kHz to 200 kHz,CW: 10MHz to 1.3GHz	2.08%
14	ELECTRO- TECHNICAL- RF/MICROWAV E (1 GHZ AND ABOVE) (Source)	RF Power at (10 MHz to 40 GHz)	Using Analog signal generator & Digital signal generator with High power sensor and Power meter and Sensor and Signal Analyzer by Direct and Transfer Method	-60 dBm to 12.4 dBm	5.98 % to 9.80 %





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Page No

Accreditation Standard Certificate Number Validity ISO/IEC 17025:2017

CC-2801

13/08/2022 to 12/08/2024

Last Amended on

4 of 8

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15	ELECTRO- TECHNICAL- TIME & FREQUENCY (Source)	Sine Wave Flatness	Using Digital signal generator & Analog signal generator by Direct Method	50 MHz to 10 GHz	6.16 % to 8 %







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Accreditation Standard Certificate Number Validity ISO/IEC 17025:2017

CC-2801

13/08/2022 to 12/08/2024

Page No 5 of 8 Last Amended on -

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		1.0	Site Facility		
1	ELECTRO- TECHNICAL- DIRECT CURRENT (Measure)	DC Current	Using 6.1/2 Digit multimeter by Direct Method	100 mA to 3 A	0.088 % to 0.26 %
2	ELECTRO- TECHNICAL- DIRECT CURRENT (Measure)	DC Current	Using 6 1/2 Digit multimeter and DC Power Supply By Comparison Method	100 mA to 3 A	0.58 % to 0.66 %
3	ELECTRO- TECHNICAL- RF/MICROWAV E (1 GHZ AND ABOVE) (Measure)	AC Voltage at 1 kHz to 100 kHz	Using 6 1/2 Digit multimeter by Direct Method	20 mV to 5V	0.28 % to 5.19 %
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5	ELECTRO- TECHNICAL- RF/MICROWAV E (1 GHZ AND ABOVE) (Measure)	Amplitude Modulation at (Rate: 1kHz to 10 kHz)	Using Modulation Meter by Direct Method	Depth 10% to 80% , CW 10MHz to 1.3GHz	1.97 % to 2.36 %





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Accreditation Standard Certificate Number Validity

(Measure)

ISO/IEC 17025:2017

CC-2801

13/08/2022 to 12/08/2024

Page No Last Amended on

6 of 8

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7	ELECTRO- TECHNICAL- RF/MICROWAV E (1 GHZ AND ABOVE) (Measure)	DC Voltage	Using DC Power supply & Power Supply and 6 1/2 Digit multimeter by Comparison Method	1 V to 650 V	0.17 % to 5.78 %
3	ELECTRO- TECHNICAL- RF/MICROWAV E (1 GHZ AND ABOVE) (Measure)	Frequency	Using Universal frequency counter & High Frequency Counters Locked with Frequency Standard by Direct Method	1 Hz to 40 GHz	26.6 µHz to 57.8 Hz
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10	ELECTRO- TECHNICAL- RF/MICROWAV E (1 GHZ AND ABOVE)	RF Power at (50 MHz to 40 GHz)	Using High Power Sensor and Power Meter with Sensor & Signal Analyzer by Direct &Transfer	-60 dBm to 13 dBm	5 % to 9.80 %

Method





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Accreditation Standard Certificate Number Validity ISO/IEC 17025:2017

CC-2801

13/08/2022 to 12/08/2024

Page No7 of 8Last Amended on-

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Page No

Accreditation Standard Certificate Number Validity ISO/IEC 17025:2017

CC-2801

13/08/2022 to 12/08/2024

Last Amended on

8 of 8

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.5	ELECTRO- TECHNICAL- TIME & FREQUENCY (Source)	Sine Wave Flatness	Using Digital signal generator & Analog signal generator by Direct Method	50 MHz to 10 GHz	6.16 % to 8 %

* CMCs represent expanded uncertainties expressed at approximately the 95% level of confidence, using a coverage factor of k = 2.

