

Advanced Wireless Communication Test Bed

Photo of Instrument:



<b>Instrument Name</b>	Test Bed for Advanced Wireless Communication System Design
<b>Instrument Model &amp; Serial No.</b>	Model: HSN/SAC 90304000
<b>Instrument Make</b>	NI Systems (India) Pvt. Ltd
<b>Category of Instrument</b>	Characterization and Testing
<b>Description of Instrument</b>	A complete hardware and software integrated wireless communication platform consisting of one base station (BS) that can support 16 antennas and two user equipment (UE) which can support 2 antennas each. The set-up works on the LabView software platform.
<b>Instrument Technical Description and Major Specifications (This Specifications Limited to Major 5)</b>	16 Tx Antenna MIMO base station- 1 No. Clock Source: Onboard 10MHz reference

## Department of Electronics and Communication Engineering, NIT Calicut

	Baseband Sampling rate: 200 million samples/sec 40MHz bandwidth/RF Channel 2 Tx by 2 Rx User Terminal – 2 No.
<b>Application of Instrument</b> (Limited to Major 4 or 5)	Next generation wireless communication systems and algorithms can be implemented and tested using the testbed hardware in real time. The software can support frameworks such as LTE, MIMO etc so as to have robust design and hardware/firmware validation.
<b>Type of Sample Required for Analysis / Testing (Quantity, Pre-Preparation, State etc.)</b> <b>Guidelines for Sample Submission – User Instructions</b>	Not Applicable
<b>Types of Analysis / Testing</b>	Hardware implementation studies
<b>Faculty In-Charge Name / Email / Contact</b>	Dr Sameer S. M. e-mail: <a href="mailto:sameer@nitc.ac.in">sameer@nitc.ac.in</a> Phone: 04952286720
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<b>Location of Instrument</b>	Advanced Wireless Communication & Signal Processing Laboratory
<b>Other Details</b>	

## Department of Electronics and Communication Engineering, NIT Calicut

### User Charges:

S.NO.	Type of Analysis/Testing	Internal - within Department of NITC	Internal - Other Departments NITC	External Academic Educational Institutes	National Labs	Industry
1	Use of the Testbed	Rs. 2500 per day	Rs. 2500 per day	Rs. 5000 per day	Rs.5000 per day	Rs.10000 per day

### Slot Booking and Payment Work Flow: