



Saankhya Labs

India · founded 2006 · saankhyalabs.com

13

PRODUCTS

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as of 20 August 2026

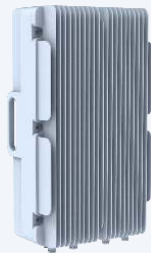
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Saankhya Labs

Saankhya Labs Private Limited is an Indian semiconductor and software-defined radio (SDR) company headquartered in Bengaluru, Karnataka, developing high-performance SDR chips, chipsets, and modem solutions for satellite communications, broadcast satellite, and terrestrial broadband applications, targeting the global SATCOM terminal, direct-to-device satellite, and broadcast satellite receiver markets. Founded in 2006, Saankhya was India's first fabless semiconductor solutions company and developed the world's first production Software Defined Radio (SDR) chipsets, holding 65+ international patents. The company's Prism SX SDR platform supports multiple waveforms including DVB-S2X, DVB-T2, ATSC 3.0, and emerging LEO satellite communication standards, delivering flexible, software-configurable modem solutions for VSAT terminals, satellite broadband modems, and direct broadcast satellite (DBS) receivers. Its product portfolio spans SDR chipsets (universal demodulator/modulator ICs), satellite IoT and MSS terminals (NAVSETU, NAVRAIL, NAVDOOT, GYANDOOT, TARANG), an S-band satphone (SAMRAT), 5G NR remote radio units, and Direct-to-Mobile (D2M) broadcast infrastructure. Saankhya Labs serves satellite operators, terminal manufacturers, broadcasters, and satellite service providers seeking cost-effective, multi-waveform, software-defined radio solutions enabling faster time-to-market for next-generation satellite communication and broadcast products. Saankhya Labs is now part of the Tejas Networks / Tata Group family of companies; its standalone corporate site (saankhyalabs.com) currently redirects to tejasnetworks.com.

This profile is generated from the live NewSpace Market catalogue. Specifications are as published by the manufacturer; every product links to a page where a request for quotation reaches the company directly.

Product catalogue



SAANKHYA LABS

5G Remote Radio Unit (RU)

ORAN 7.2x-compliant multiband 5G Remote Radio Unit with signal-aware fronthaul compression and RAN analytics.

Compliance	0-RAN 7.2x
Key IP	Signal-aware fronthaul compression, CFR & DPD

price on request



SAANKHYA LABS

Broadcast Radio Head (BRH)

Low-power, low-tower digital terrestrial transmitter enabling Direct-to-Mobile (D2M) broadcast reception.

Topology	Low Power Low Tower (LPLT), SFN and MFN
Output power	5 to 40 W

price on request



SAANKHYA LABS

GYANDOOT L-Band Satellite Receive-Only Terminal

Highly versatile EDUSAT receiver delivering digital audio, video, graphics and data over the EDUSAT satellite network.

Frequency band	950-2150 MHz
Acquisition range	±30 kHz
Bandwidth	1 Msps to 5.5 Msps
Data rate	144 Kbps to 5.5 Mbps
Input dynamic range	0 dBm to -40 dBm
Dimensions	105 x 70 x 25 mm
Weight	150 g

price on request



SAANKHYA LABS

Lehar S-band Broadcast Receiver

Lehar is a compact S-band satellite broadcast receiver that demodulates satellite signals and provides digital data over USB to a host system like a smartphone, tablet, or PC.

Frequency Band	2560 – 2590 MHz
Symbol Rate	144 Kbps – 5.5 Mbps
Dimensions	105mm x 74 mm
Weight	95 gms
Power Supply	USB Powered Low Power Consumption ~ 2W
Antenna	Patch Antenna with > 2.5 dBi gain
RF Sensitivity	-95 dBm @ 5.5 MSPS

price on request



SAANKHYA LABS

NAVRAIL S-Band Locomotive Tracking Terminal

Two-way MSS satellite terminal for real-time locomotive tracking and communication over ISRO's GSAT network.

Forward channel frequency	2560-2590 MHz
Forward channel data rate	32 Kbps scalable to 512 Kbps
Return channel frequency	2670-2690 MHz
Return channel channel spacing	10 kHz

price on request



SAANKHYA LABS

SAMRAT S-Band Satphone

Handheld two-way S-Band satellite mobile radio terminal that turns a standard Android phone into a satellite smartphone.

Forward channel frequency	2560-2590 MHz
Forward channel data rate	2.7 Kbps scalable up to 512 Kbps
Return channel frequency	2670-2690 MHz
Return channel data rate	2.7 Kbps
Transmit power	+30 dBm EIRP
Access scheme	SCPC-DAMA TDM / RandomALOHA-SCPC

price on request



SAANKHYA LABS

SDR Chipset

Award-winning, patented, and fully programmable Software Defined Radio (SDR) chipsets designed for ultra-low power consumption and small footprint, supporting multiple waveforms ac

price on request



SAANKHYA LABS

SL-300X Universal Demodulator

Compact next-gen universal DTV demodulator SoC for live TV reception on smart TVs, set-top boxes and home gateways.

Architecture	Software Defined Radio (SDR)-based demodulator SoC
Integration	Integrated FEC decoder, de-interleaver memory, high-precision ADC & PLLs
Applications	Terrestrial, satellite and cable DTV reception

price on request



SAANKHYA LABS

SL-400X Mobile TV Integrated Receiver

Compact next-generation universal mobile DTV receiver IC.

price on request



SAANKHYA LABS

SL100x Universal Demodulator

SL100x is a fully Software Defined Radio (SDR) baseband demodulator IC supporting worldwide terrestrial, cable, radio, TV and satellite receiver broadcasting standards through soft

INPUT	Flexible interface to IF/LIF tuners and digital input
OUTPUT	Parallel Digital Transport Stream output interface; AGC outputs for RF and IF stages; CVBS
Single Carrier	QPSK, 16/32/64/128/256 QAM
Multicarrier (OFDM)	QPSK, 16/32/64/128/256 QAM
TV / Cable / Radio Standards	ATSC, DVB-T, ISDB-T, DTMB, Clear QAM, DVB-C, ISDB-C, NTSC, PAL, SECAM, FM, DRM, DAB
Package	LFBGA 176-pin; 12×12 mm
Power Supply	3.3 V, 2.5 V and 1.2 V

price on request



SAANKHYA LABS

SL900x Universal Modulator

SL900x is a family of fully software-defined universal baseband modulator ICs supporting worldwide terrestrial and cable TV standards as well as non-standard, proprietary waveforms

INPUT	Digital Parallel Transport Stream (TS)
OUTPUT	Zero-IF and Low-IF (up to 10MHz) and Digital Output; I2C for programming and waveform down
Single Carrier	QPSK, 16/32/64/128/256 QAM
Multicarrier (OFDM)	QPSK, 16/32/64/128/256 QAM
TV / Cable / Radio Standards	ATSC, DVB-T, ISDB-T, Clear QAM, DVB-C, ISDB-C
Package	LFBGA 176-pin; 12×12 mm 0.80 mm ball pitch
Power Supply	3.3 V, 2.5 V and 1.2 V

price on request



SAANKHYA LABS

TARANG L-Band Multi-Channel Burst Demodulator

TARANG is an SDR-based L-Band Multi-Channel Burst Demodulator for Mobile Satellite Service (MSS) networks, deployed at the hub-side to receive and demodulate satellite signals from

Frequency Range	950-2150 MHz
Frequency Tuning Step	1kHz
Frequency Acquisition Range	+ 5KHz
I/P Level Range	-45 to -70 dBm
I/P Impedance	50 Ω
I/P Return Loss	I>18 dB
I/P Spectrum Selection	Normal, Inverted

price on request



SAANKHYA LABS

USB DTV Receiver Dongle

A compact UHD Universal Mobile DTV Receiver dongle that enables reception of live TV signals on handheld devices, supporting multiple digital terrestrial TV broadcast standards.

Frequency Range	470 – 858 MHz UHF Band
Channel Support	ATSC 1.0, ATSC 3.0, DVB-T, DVB-T2, ISDB-T, 1Seg
Operating Temperature	0 to 85°C
Interfaces	RF Interface to antenna; USB Type C to Handheld device or PC

price on request

Contact Saankhya Labs

Open the company profile on NewSpace Market to see full specifications and datasheets, and to send a request for quotation that reaches the manufacturer directly.

<https://newspacemarket.com/companies/saankhya-labs/>

<https://www.saankhyalabs.com>

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