

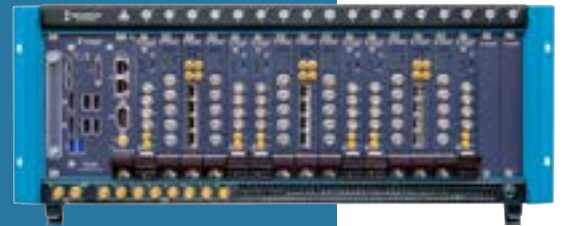
# Next generation COMINT RECEIVER PLATFORM

## HUGIN 4000

**HUGIN 4000 is the latest addition to our monitoring receiver product line.** Built on a modular platform, HUGIN 4000 has up to 6144 narrowband DDCs, which is by far the highest number of channels for a single receiver platform. HUGIN 4000 is a game changer in the domain of strategic COMINT, and an ideal solution for monitoring, scanning and direction finding applications.

### HUGIN 4000

- 12 RF receiver channels
- Frequency Range 2 MHz - 6 GHz
- 960 MHz aggregated bandwidth
- 6144 narrowband DDCs



#### High Sensitivity and Dynamic Range

To develop communications intelligence, it is vital to intercept and analyze as many radio communication signals as possible. With an aggregated bandwidth of up to 960 MHz and a frequency range between 2 MHz and 6 GHz, HUGIN 4000 has a very high sensitivity and dynamic range that enable the operators to intercept both weak and strong signals concurrently.

#### Cost Efficiency is Paramount

Communication surveillance is a very expensive process as the costs incurred for monitoring are directly proportional to the number of signals intercepted. Typically, multiple receivers are required to monitor several areas of interest. Built on the latest software defined radio technology HUGIN 4000 provides up to 12 RF input channels and 6144 DDCs on a single receiver platform thereby substantially reducing the cost per channel.

#### Independent & Phase Coherent Tuning

Each of the 12 RF input channels has a real time bandwidth of 80 MHz. The independent tuning feature on the HUGIN 4000 enables the operators to place each 80 MHz band anywhere between 2 MHz – 6 GHz. The HUGIN 4000 is also equipped with coherent phase tuning capability allowing direction finding and beamforming applications.

#### Versatile, Flexible and Customizable Receiver Platform

HUGIN 4000 is available in several configurations with 2 to 12 RF input channels. The highly intuitive API ensures easy integration with any COMINT monitoring software. The modular software & hardware architecture enables various configurations and customization of HUGIN 4000.

## Technical Specifications HUGIN 4000

Receiver	
RF receiver channels (Rx)	2 - 12, SMA connectors
Frequency range	2 MHz - 6 GHz
Instantaneous bandwidth	80 MHz per RF input, individually tunable
FFT width	4k - 256k point FFT
Noise Figure	6 dB (LNA)
Filter bank 2-100 MHz	HP filters: 2, 20, 30 MHz LP filters: 30, 40, 83, 100 MHz FM notch filter
Filter bank 100-450 MHz	Tunable low and high pass filters, min 20 MHz bandwidth
Sub-octave preselectors	390 - 620 MHz 540 - 850 MHz 770 - 1210 MHz 1130 - 1760 MHz 1680 - 2580 MHz 2500 - 3880 MHz 3800 - 6000 MHz
Internal reference clock @100 MHz	Phase noise: -129 dB/Hz @10 kHz
DDC channel specification	
Wideband DDC	1 wideband DDC per RF input, up to 80MHz bandwidth per DDC
Narrowband DDCs	1024 - 6144 (2 RF inputs share up to 1024 DDCs)
Digital output	Demodulated audio or IQ - VITA-49 compliant (optional)
Demodulated data format	Real (16 bit) - VITA-49 compliant (optional)
IQ data format	Complex (64 bit) - VITA-49 compliant (optional)
Supported demodulations	AM, FM, LSB, USB, CW
IQ output rate	Configurable from 3 kSPS to 50 MSPS
Mechanical / Environmental	
Form factor	4U - 19" rack mountable chassis
Operating Altitude	3,000 m

**Novator Solutions AB**, part of Novator Consulting Group, is a leading provider of products & system development within SIGINT & EW domains. Our highly skilled R&D team applies its extensive know-how in high-speed data processing and software defined radio "SDR" technology to develop next generation COMINT receivers and ELINT signal recorders. Our software expertise combined with a modular hardware architectures allows us to provide customized products and complete turn-key solutions tailored to specific project or mission requirements.

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