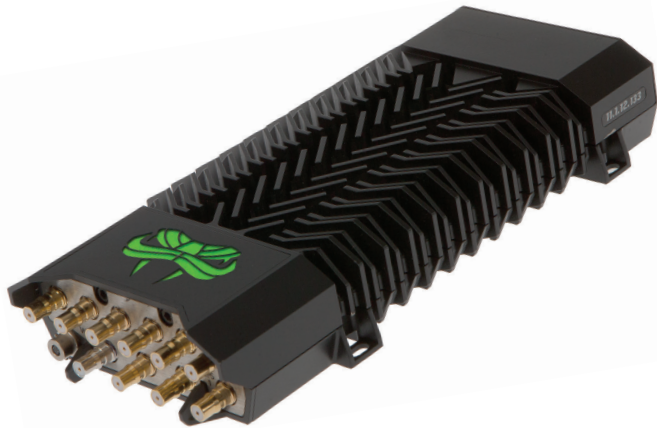


# NEN 3000-VIPER



## YOUR MISSION KNOWS NO BOUNDARIES, YOUR EQUIPMENT SHOULDN'T EITHER

The NEN 3000 is a highly capable and robust Software Defined Radio (SDR) that eliminates the need to carry multiple pieces of equipment to support multiple mission types. The NEN 3000's flexible front-end and commercial RF connectors provides the technical agility to process a variety of radio technologies and frequencies from TETRA to LTE all in a single, compact, Low-SWaP platform.

The NEN 3000 ensures your front line personnel have continuous access to information allowing them to make faster and more effective decisions in the field. It sets a new standard in SWaP without compromising performance.

Weighing just one pound, the NEN 3000 is portable and compact enough to fit in the palm of your hand. It is ideal for quick deployment in man-packs, small unmanned aerial systems (sUAS), in-vehicle, and semi-permanent or fixed installations.

## SUPPORTED APPLICATIONS AND TECHNOLOGIES



### LINE OF BEARING

GSM, CDMA2K, UMTS, LTE, WiMAX, and Wi-Fi



### RAPIDLY DEPLOYABLE BASE STATION

GSM, CDMA2K, UMTS, and LTE-FDD



### GRAPHICAL RECORD AND I/Q PLAYBACK

Spectrum Analysis and Signal Identification over 4 independent receivers at 40 MHz per path  
User Customized: 70 MHz - 6 GHz



### ARTIFICIAL INTELLIGENCE SURVEY

GSM, CDMA2K, UMTS, and LTE



### PTT SURVEY AND CYBER

DMR, P25, Tetra, Analog



### ROCKSLIDE

GSM Bands - 850, 900, 1800, 1900  
UMTS Bands - 1-14, 19-22, 25, 26



### TACTICAL LTE NETWORK

Stand-alone, high-bandwidth LTE data link

## FEATURES

**Compact and Portable:** Low Size, Weight and Power (Low-SWaP)

**Dual Carrier Base Transceiver Station**

**Rugged:** MIL-STD-461F and MIL-STD-810G Compliant

**Transmission and Reception:** 70 MHz - 6 GHz

**Specialized Front-End Connectors**

**Quickly and Easily Pivot Between Applications and Missions**

- Set Up Time: < 5 Minutes
- Switch Application Time: < 2 Minutes

**Mid-power (5 W avg.) Amplifier Is Available for the Rapidly Deployable Base Station Application, Tactical LTE Network**

## TARGET ENVIRONMENTS



sUAS



MAN  
PACKABLE



VEHICULAR



FIXED SITE

# NEN 3000 SPECIFICATIONS

## SIZE, WEIGHT AND POWER

Dimensions (L x W x H)	7.24" x 3.15" x 1.19"
Weight	1.0 lb
Input Power	+9 to +36 VDC
Output Power	10m W
Power Consumption	12 W (typical) 25 W (max)

## DURABILITY

MIL-STD-461F	RE101	Radiated Emissions
MIL-STD-461F	RS103	Radiated Susceptibility
MIL-STD-810G	Method 500.5, Procedures I and II	Low Pressure
MIL-STD-810G	Method 501.5, Procedure II	High Temperature
MIL-STD-810G	Method 502.5, Procedure II	Low Temperature
MIL-STD-810G	Method 503.5, Procedure I-C	Temp Shock
MIL-STD-810G	Method 507.5, Procedure II	Humidity
MIL-STD-810G	Method 510.5	Dust
MIL-STD-810G	Method 514.6, Procedure I (Fixed Wing)	Vibration
MIL-STD-810G	Method 516.6, Procedure IV	Shock
Operating Temperature		-40°C to 70°C

## INTEGRATED TECHNOLOGY

Instantaneous Bandwidth	RX: 56 MHz TX: 40 MHz
GPS	External Antenna
Wi-Fi	External Antenna
General Purpose Processor (GPP)	Freescale i.MX6 Quad-Core Processor @ 1.0 GHz / core
Field Programmable Gate Arrays (FPGA)	Xilinx Virtex-7 VX485T-2

## SUPPORTED TECHNOLOGIES AND FREQUENCY BANDS

GSM	380, 450, 480, 710, 750, 810, 850, 900, 1800, and 1900 MHz
UMTS	700, 800, 850, 900, 1700, 1800, 1900, 2100, 2600 and 3500 MHz
LTE	Bands: 1-14, 17-28, 30-31, 65-66, 68, 71
CDMA2K	450, 800, and 1900 MHz
Wi-Fi	2400 MHz
WiMAX	2300, 2500, and 3500 MHz
PTT	70 MHz - 1 GHz

## CONNECTIVITY AND CUSTOM CONNECTIONS



- 1 GPS Connector
- 1 Wi-Fi Connector
- 8 Auxiliary RF Ports (Generic RX / TX)
- 1 Expansion Port for Communication and Power to External Peripherals (Custom Antennas, Power Amplifier, etc.)
  - 4 Generic I/O Pins (1.8V)
  - + 5V / Ground



- Gigabit Ethernet for Command and Control
- eSATA Port
- DC Power Port

For more information or to order the NEN 3000 please contact: [ATInfo@motorolasolutions.com](mailto:ATInfo@motorolasolutions.com)

The information and specifications provided are for informational purposes and are subject to change without notice.

Motorola Solutions, Inc., Applied Technology, 2100 Progress Parkway, Schaumburg IL 60196 U.S.A.

MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. © 2021 Motorola Solutions, Inc. All rights reserved. 02-2022



[www.motorolasolutions.com/appliedtechnology](http://www.motorolasolutions.com/appliedtechnology)

Commercial-In-Confidence