

Oceus Networks Xiphos[®] Macro - Virtualized

COMPACT AND RAPIDLY DEPLOYABLE OUTDOOR SOLUTION
UTILIZING A VIRTUAL EPC

Reliable communications systems are essential to success for on-the-move ground teams. Xiphos[®] Macro Virtualized is a tactical, compact 4G LTE / 5G NR Macro system optimized for deployment where reduced size, weight and power consumption are driving factors.

Xiphos Macro Virtualized (XMAC-V) is a complete 4G Long Term Evolution (LTE) / 5G New Radio (NR) solution that offers full flexibility in deployments. It provides mobile broadband quickly in areas where no other suitable network exists or a private network is desired. The XMAC-V offers an outdoor Macro radio solution that is connected to a virtualized core network which provides a future-proof solution.

XMAC-V is based on Ericsson's world leading 4G/5G radio technology, which provides superior RF output power, range, and performance.

XMAC-V provides a complete on-the-move system for critical missions and has been designed for a virtualized environment for secure, high-speed voice, video and data communications to the tactical edge.



XIPHOS

◀ XMAC-V Outdoor
Baseband 6303
Pole Mount

KEY BENEFITS

MISSION-CRITICAL OPERATIONS

XMAC-V supports mission-critical operations by providing users access to fast mobile broadband connectivity.

EASY-TO-USE

Installs easily, operates autonomously and powers up in minutes.

BASED ON COMMERCIAL TECHNOLOGY

The use of standards-based carrier grade commercial 4G/5G technology, XMAC-V allows customers to leverage industry innovation and economies of scale to lower costs and to equip users with best-of-breed tools, applications and smartphones.

HIGH CAPACITY DATA TRANSFER

High data throughput enables many applications in demand, such as biometric information; databases; Intelligence, Surveillance and Reconnaissance (ISR); positioning and sensor data; situational awareness and collaboration; streaming HD video and Voice over IP.

MULTITUDE OF FREQUENCIES

Supports a wide range of FDD and TDD bands, and it is compatible with commercial 4G LTE devices.

NETWORK SCALABILITY

XMAC-V can be deployed in a Network of Xiphos (NOX) configuration, allowing users to move between coverage areas while maintaining already established sessions. This provides flexible network scalability by increasing the aggregated coverage area, data throughput and concurrent connected radio sessions for each deployed Xiphos system.

ADVANCED NETWORK OF XIPHOS (ANOX)

ANOX allows Xiphos systems to work together. It detects connectivity between units, synchronizes key elements and contains algorithms that adjust various elements in real-time to provide the best connectivity to the end-user.

INTERFERENCE DETECTION

Detects RF interference and displays alarms on the operations & maintenance (O&M) dashboard.

CARRIER GRADE FEATURES AND FUNCTIONS

Supports the latest features being deployed in the most advanced carrier networks. This includes support for Quality of Service (QoS), policy management and enforcement, Self Organizing Network (SON), priority and pre-emption handling and radio interface optimization.

XIPHOS MACRO VIRTUALIZED

The Xiphos Macro Virtualized is optimized for reduced size, weight and power consumption while still providing Macro RF capability.

XMAC-V is a complete outdoor baseband and radio solution with virtualized core network functionality that is easily installed and configured on customer's virtual network.

The system contains the following main components:

- Macro Radio Unit with AC output power, frequency band dependent.
- 6303 outdoor baseband processor.
- Virtualized Software for Evolved Packet Core (EPC), Home Subscriber Server (HSS), and O&M SW.



XIPHOS XMAC-V FIGURES AND FACTS

BASEDBAND 6303		SMALL CONFIG.	MEDIUM CONFIG.	LARGE CONFIG.
SIZE (HXWXD)	10.5" x 8" x 4"			13.8"x11.7"x5.4"
WEIGHT	12 lbs			
POWER INPUT	110V AC			
NOMINAL VOLTAGE	100-250V AC			
SUPPORTED RADIO INTERFACE CONNECTIONS	Three (3) radio ports			
MAXIMUM NUMBER OF CELLS (FDD/TDD)	Twelve (12)			
SUPPORTED BANDWIDTHS	1.4, 3, 5, 10, 15, or 20 MHz			
MAXIMUM NUMBER OF RADIOS PER CASCADE CHAIN	Six (6)			
ENVIRONMENTAL				
TEMPERATURE HIGH	131F/55C			
TEMPERATURE LOW: RADIO	-40F/-40C			
EMI, FCC PART 15, CLASS A	Compliant			
SUPPORTS	<100 users; Single eNodeB/ Single Cell	100-500 users; Single eNodeB/up to 3 Cells		
ESXI VERSION	6.5 update 1 or newer	6.5 update 1 or newer		6.5 update 1 or newer
vCPUs	Four (4) - 2 Sockets/2 Cores per socket with hyperthreading	Eight (8) - 4 Sockets/2 Cores per socket with hyperthreading		Eight (8) - 4 Sockets/2 Cores per socket with hyperthreading
LOGICAL CPU's	Four (4)	Eight (8)		Eight (8)
HARDWARE CPU	Dual Core i7 @ 2.20 GHz or better	Quad Core i7 3770 @ 3.4GHz or better		Quad Core i7 6700TE @ 2.4GHz or better (i7-6700 @3.4GHz preferred)
RAM	8GB Minimum; 16GB Recommended	8GB Minimum; 16GB Recommended		16GB Minimum; 32GB Recommended
STORAGE	250GB	250GB		250GB
XIPHOS VM	120GB	120GB		120GB
ESXi	10GB	10GB		10GB
SNAPSHOTS	120GB	120GB		120GB
LTE RADIOS	2203, 2212, 2217, 2219, 4412, 4478 <i>(Not all frequencies are available for all radio types)</i>			
LTE FREQUENCY BANDS (MHZ)	2100 (1),1900 (2),1800 (3),172100 (66A),800 (5),2600 (7),700 (12,14,17,28),800 (20) 2600 (41),3500 (48), 600 (71), additional bands per customer requirements			

To learn more about Oceus Networks' Xiphos solutions, visit: www.oceusnetworks.com