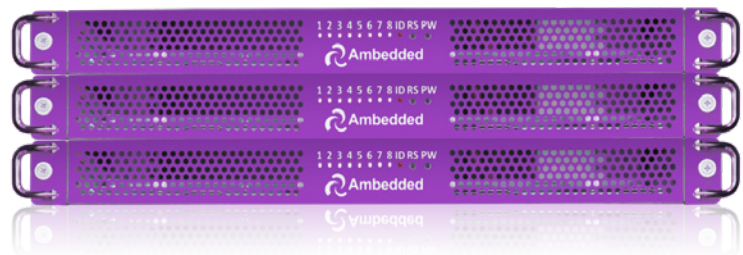


Mars 400Nx Arm-Based Converged Video Management System & Scalable Software-Defined Storage

Network Optix VMS Ready



Specification

Server Platform	
Mars 400 NX Server chassis	<ul style="list-style-type: none"> 8x ARM 64bit A72 microservers Total of 32 cores, 32GB Memory up to 8x 3.5"/2.5" SATA 6Gb disk 4x 10Gbps RJ45 & SFP+ 100 Watts power consumption
ARM MicroServer Node	<ul style="list-style-type: none"> Microserver node has the following specs <ul style="list-style-type: none"> CPU: ARM Quad-Core 64-bit Cortex-A72 1.2GHz, Memory: 4GB DDR4-SDRAM, System Storage: onboard 8GB eMMC Network: Dual 2.5Gbps Ethernet Storage Interface: 2x SATA 6Gbps ports 3.5"/2.5" SATA disk 64GB M.2 SATA SSD for performance acceleration Operation System and software: Pre-installed OS and Nx Server or Storage Software
Network	<ul style="list-style-type: none"> Dual in-chassis switches (Hot-Swappable) <ul style="list-style-type: none"> Uplink: Each switch has 2x 10Gbps SFP+/10G Base-T RJ-45 interface (combo interface) Internal Link: Each switch has 8x 2.5Gbps port connect to 8x microserver nodes
Software Configuration	Each ARM microserver node can be configured as Nx Witness Server and storage nodes depending on project design
Management Interface	<ul style="list-style-type: none"> Web-based user interface: <ul style="list-style-type: none"> Storage: Unified Virtual Storage(UVS) Manager Nx Witness VMS
Remote Management Controller	<ul style="list-style-type: none"> Remote Server Node Management through ethernet <ul style="list-style-type: none"> Independently control each server node power and reset Server node console over ethernet Chassis power, fan speed, Panel LED control
Power Supply	Dual redundant 300 Watts power supply unit (Active-Active)



Software-Defined Storage

Version	<ul style="list-style-type: none"> ▪ Ambedded tuned Ceph community version Nautilus, ▪ Optional: SUSE Enterprise Storage 6 (Nautilus)
Storage Cluster & Data protection	<ul style="list-style-type: none"> ▪ Scale-out to an unlimited number of node & hard drive ▪ No RAID controller, data is chunked and distributed to all server nodes by the software algorithm ▪ Data is protected by replication or erasure coding. ▪ Software definable failure domain and the maximum number of failures ▪ Fast and automatic data recovery ▪ Support disk encryption ▪ Support mirroring/replication data to a second storage cluster
Virtual disk	<ul style="list-style-type: none"> ▪ Each Nx VMS server mounts a virtual disk for storing recorded videos ▪ Virtual disks can be re-sized or mount more virtual disks if bigger capacity is required for the NX Server.
User Cryptographic Authentication	Storage cluster use secret keys to control the accessibility of client servers

Nx Witness Server Ready

VMS Software	<ul style="list-style-type: none"> ▪ Nx Witness server software pre-installed ▪ Nx VMS license shall be activated by Nx Partners
Nx Server	<ul style="list-style-type: none"> ▪ Nx Servers run on microserver nodes. (Nx and storage run on separate nodes) ▪ One Mars 400Nx appliance supports up to 240 cameras. (30 cameras per microserver x 8 nodes in one appliance) ▪ The number of cameras supported by microserver is based on 1080p, 30 fps, high quality, H.264 video format