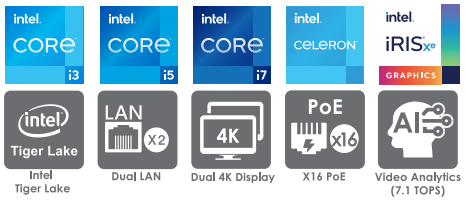
NV1

1U Smart NVR System
with Intel® Tiger Lake-UP3 Processor

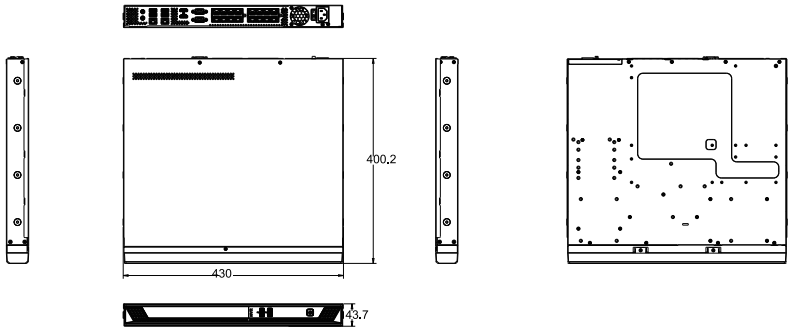
Introduction

- Intel® Tiger Lake-UP3 Core i7/i5/i3/Celeron ULV processors
- 16-CH H.265/H.264 decoding ability & simultaneous playback
- 16-CH AI video analytics (7.1 TOPS)
- Equipped 0/8/16 802.3 at/af PoE ports
- Dual 4K display for clear monitoring
- Support x2 HDD RAID 0/1 storage



I/O Interface

Dimension (mm)



Embedded System

MITAC
MITAC COMPUTING TECHNOLOGY CORP.

NV1 NVR System

SYSTEM	
CPU	11st Gen Tiger Lake-UP3 Intel® Celeron 6305E ULV Processor, 1.80 GHz, TDP:15W (Option: Core i3-1115G4E / i5-1145G7E / i7-1185G7E, TDP: up to 28W)
Chipset	Intel® SoC Integrated
System Memory	DDR4 3200MHz, 2 x 260-pin SO-DIMM, Max. 64GB (Non-ECC)
Graphics & AI	Intel® Iris Xe Graphics Video Decoding (1080P, H.264/H.265): up to 64 Channels Video Recording (1080P, H.264/H.265): up to 64 Channels Video Playpack (1080P): up to 64 Channels Video Analytics/Deep learning (1080p): 6-10 Channels (7.1 TOPS)
Display Interface	2 x HDMI 1.4 (Up to 4K@30 Hz)
Storage Slot	2 x 3.5" internal HDD (RAID 0/1)
Ethernet	I1 x Intel® I225-LM 2.5GbE LAN, 1 x Intel® I219-LM Giga LAN
Audio	Realtek® ALC888S
I/O Chipset	Nuvoton NCT6126D
TPM	Nuvoton NPCT750AABYX TPM2.0
Expansion Slot	1 x M.2 2242/2260/2280 M-key slot (PCIe x1, SATA) 1 x MiniPCIe full/half size slot (PCIe x1, SATA, USB)
Internal Speaker	1 x Buzzer
Indicator	1 x Power button / 1 x Power LED / 1 x HDD Activity LED / 1 x Alarm LED
Front I/O	2 x USB 2.0
Rear I/O	4 x USB 3.2 Gen 2 2 x HDMI 1.4 1 x Line-in 1 x Line-out 2 x RJ-45 1 x RS232 port 1 x RS485 port
IP Camera Input (Optional)	Options#1: 8 x PoE ports (IEEE 802.3 af/at, Max 25.5w for single port, 80w in total) Options#2: 16 x PoE ports (IEEE 802.3 af/at, Max 25.5w for single port, 150w in total)
Edge AI Engine (Optional)	1X Movidius Myriad X VPU, and Intel® OpenVINO™ toolkit supported (Optional)
POWER REQUIREMENT	
Power Input	100~240V AC-in
Power Adapter	Built-in 280W Flex ATX PSU with AC Plug
MECHANICAL	
Thermal Design	With Fan
Material	Bezel: Plastic / Chassis: Steel
Weight	3.5kg
Mounting	Rackmount
Dimensions (W X D X H)	19" 1U Chassis : 427 x 381 x 44.4 mm
ENVIRONMENTAL	
Operating Temperature	0 ~ 50°C (32 ~122°F)
Storage Temperature	-20 ~ 70°C (-4 ~158°F)
Operating Humidity	10% ~ 90% R/H (Non-condensing)
Vibration Resistance	5Hz~500Hz / 2Grms / 3Axis (Non-operating)
Shock Resistance	120G, 2ms Duration (Non-operating)
Certification	CE / FCC Class B
OS	
OS Support	Windows® 10 64bit, Linux (support by request)

Ordering Information

Model Number	Processor	PoE	HDD	Power	Model Number	Processor	PoE	HDD	Power
NV1-6305E-0P	Celeron 6305E	0	2	100~240V AC-in	NV1-1115G4E-16P	i3-1115G4E	16	2	100~240V AC-in
NV1-6305E-16P	Celeron 6305E	16	2	100~240V AC-in	NV1-1145G7E-0P	i5-1145G7E	0	2	100~240V AC-in
NV1-1115G4E-0P	i3-1115G4E	0	2	100~240V AC-in	NV1-1145G7E-16P	i5-1145G7E	16	2	100~240V AC-in

Packing List

Packing		
• 1 x NV1 System	• 1 x Quick Installation Guide	• 1 x Rackmount Kit
• 1 x Screw Pack	• 2 x AC Power Cord (US & EU)	