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LEDCAST
SCREEN & DESIGN

NOVA STAR

NOVA STAR

NOVASTAR PRODUCT LIST

2024 V2.0

Xi'an NovaStar
Tech Co., Ltd.



Headquarter Office

📍 NovaStar Park, 3rd Yunshui Road, Xi'an, Shaanxi, 710077, China

📞 +86-29-68216000

✉️ **Inquiry** : info@novastar.tech

🏠 www.novastar.tech

Support : support@novastar.tech

NovaStar Overseas Video Controller

Product Function Table (V2.0)

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Model	VX4S-N (*EOL)	VX400	VX600	VX1000	NovaPro UHD Jr
Loading Capacity (pixel)	2,300,000	2,600,000	3,900,000	6,500,000	10,400,000
Video Source Depth	8bit	8bit	8bit	8bit	8 / 10 / 12bit
Maximum Input	Max Width: 3840×657@60Hz Max Height: 1246×1920@60Hz Min: 800×600@60Hz	Max Width: 3840×648@60Hz Max Height: 800×2784@60Hz Min: 800×600@60Hz	Max Width: 3840×648@60Hz Max Height: 800×2784@60Hz Min: 800×600@60Hz	Max Width: 4092×1136@60Hz Max Height: 1060×3981@60Hz Min: 800×600@60Hz	Max Width: 8192×1080@60Hz Max Height: 1080×8192@60Hz Min: 800×600@60Hz
Maximum Output	Max Width:3840 Max Height:1920	Max Width:10240 Max Height:8192	Max Width:10240 Max Height: 8192	Max Width:10240 Max Height: 8192	Max Width: 16384 Max Height: 8192
Video Input	HDMI×1,DVI×1 VGA×1,CVBS×1 DP×1,SDI×1	HDMI1.3×2,DVI×1 3G-SDI×1 1×10G optical fiber port(OPT1)	HDMI1.3×2, DVI×1 3G-SDI×1 1×10G optical fiber port(OPT1)	HDMI1.4×2, DVI×2 3G-SDI×1 1×10G optical fiber port(OPT1)	HDMI2.0×1, DVI×4 DP1.2×1 12G SDI×2
Output	Network Port×4 DVI LOOP×1 SDI LOOP×1 DVI Monitor×1	Network Port×4 HDMI1.3 LOOP×1 DVI LOOP×1 SDI LOOP×1 HDMI1.3×1 (Monitor) 1×10G optical fiber port(OPT2)	Network Port×6 HDMI1.3 LOOP×1 DVI LOOP×1 SDI LOOP×1 HDMI1.3×1 (Monitor) 1×10G optical fiber port(OPT2)	Network Port×10 HDMI1.4 LOOP×1 DVI LOOP×1 SDI LOOP×1 HDMI1.3×1 (Monitor) 1×10G optical fiber port(OPT2)	Network Port×16 10G Fiber Output×4 12G SDI LOOP×2 HDMI2.0 LOOP×1 HDMI×1 (Monitor)
Splicing Loading Capacity	✓	✓	✓	✓	✓
Max Layers	2	2	3	3	3
Max Presets	10	10	10	10	10
Knob Brightness Adjustment	✓	✓	✓	✓	✓
USB Disk Play On Board	×	×	×	×	×
Control Method	USB, TCP/IP	USB, TCP/IP	USB, TCP/IP	USB, TCP/IP	USB, TCP/IP,RS232
Control Protocol	TCP/IP	TCP/IP	TCP/IP	TCP/IP	TCP/IP
Control software	NovaLCT	NovaLCT / V-Can	NovaLCT / V-Can	NovaLCT / V-Can	NovaLCT / V-Can

NovaStar COEX Control System (5G)

Product Function Table (V2.0)

Solutions (Software / Controller/ Receiving card)	Functions	VMP,CX40 Pro,CA50E
Hardware	Inputs	2×HDMI 2.0(IN+LOOP), 1×DP1.2, 2×12G SDI (IN+LOOP)
	Outputs	6×5Gbps Neutrik
	OPT	1×40Gbps, QSFP+
	Genlock	1×IN, 1×LOOP
	S/PDIF OUT	Reserved
	Communication	TCP/IP protocol, RJ45 interface RS232 protocol, RJ45 interface(Central Control System)
Inputs	Max Resolution	4096×2160@60Hz
	Max Width	HDMI 2.0 : 8192, DP 1.2 : 8192
	Max Height	HDMI 2.0 : 8192, DP 1.2 : 8192
	Frame Rates	23.98~120/144/240Hz custom, step is 0.01Hz
	Input Bit Depth	8/10/12bit
	Color Space/Chroma Subsampling	RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2
	Color Gamut	Rec.709, DCI-P3, Rec.2020, Custom color gamut
	Dynamic Range	SDR, HDR10-ST2084, HDR10-ST2086, HLG
Outputs	Controller Loading Capacity (8Bit & 60Hz)	9,000,000
	Output Width Range	800~16384
	Output Height Range	600~16384
	Layers (All-in-one Mode)	3
	No Rectangle Calculating Limitation	✓ (blank panels will not occupy loading capacity)
	Output Bit Depth	8bit, 10bit, 12bit
	8 Bit & 60Hz Single Output Loading Capacity	2,592,000
	10 Bit & 60Hz Single Output Loading Capacity	2,073,000
	12 Bit & 60Hz Single Output Loading Capacity	1,728,000
Color Management	Input Color Adjustment	Black level, Contrast, Saturation, Hue, Shadow, Highlight
	14CH Color Correction	✓
	Color Replacement	✓
	3D LUT	Support cube file with 17×17×17
	Color Curve Editor	✓
	Output Color Gamut Management	Original color gamut, Standard color gamut(Rec.709, DCI-P3, Rec.2020) Custom color gamut
Image Quality Improvement	Precise Grayscale	✓
	22 Bit+	✓
	Color Management	✓
	Brightness/Chroma Calibration	✓
	Full Grayscale Calibration	✓
	Multi-Mode	✓
	Thermal Compensation	✓
	Dynamic Booster	✓
	Brightness Overdrive	✓
Camera Shooting Adaptation	Sync (Active source, Genlock, Internal)	✓
	Frame Multiplication/Frame Multiplexing	Support 1~6 times multiplication
	Sync Phase Offset	Support angle, fraction, absolute
	Shutter Fit	Support 22.5~360° Adjustment accuracy is 0.001°
	Low Latency	✓
Secondary Development Integration	HTTP	✓
	SNMP	✓
	Art-Net	✓
	Private Protocol	Customized Support

NovaStar COEX Control System (card-based modular design 1G & 5G)

Product Function Table (V2.0)



Solutions (Software / Controller/ Receiving card)	Functions	MX2000 Pro	MX6000 Pro
Hardware	Input cards	Video-over-IP: MX_1× ST 2110 (25G) Input Card, MX_2× ST 2110 (25G) Input Card. 8K Level: MX_2×HDMI 2.1 Input Card, MX_2×DP 1.4 Input Card. 4K Level: MX_4×HDMI 2.0 Input Card, MX_4×DP 1.2 Input Card, MX_4×12G SDI Input Card.	
	Output cards	MX_4×10G_Fiber Output Card (Work with Armor series receiving card). MX_1×40G_Fiber output card (Work with CA series receiving card)	
	Max,Input Card	2	8
	Max,Output Card	2	8
	Genlock	Bi-level, Tri-level, Blackburst	
	S/PDIF OUT	Reserved	
	Communication	TCP/IP protocol, RJ45 interface RS232 protocol, RJ45 interface(Central Control System)	
Inputs	Single Input Max Resolution	HDMI2.0/ DP1.2 4096×2160@60Hz/8192×1080@60Hz, HDMI2.1 8192×4320@30Hz, DP1.4 7680×4320@30Hz, 12G-SDI 4096×2160@60Hz	
	Single Input Max Width	8192	
	Single Input Max Height	8192	
	Frame Rates	23.98/24/25/29.97/30/47.95/48/50/59.94/60/71.93/72/7 5/100/119.88/120/143.86/144/240Hz	
	Input Bit Depth	8/10/12bit	
	Color Space/Chroma Subsampling	RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2	
	Color Gamut	Rec.709, DCI-P3, Rec.2020, Custom color gamut	
	Dynamic Range	SDR, HDR10-ST2084, HDR10-ST2086, HLG	
Outputs	Controller Loading Capacity (8Bit & 60Hz)	35.38 million	141 million
	Output Width Range	single output card 16384	
	Output Height Range	single output card 16384	
	Layers (All-in-one Mode)	4 4K layers in one single output card, 8 4K layers in whole device, Support layer roaming	4 4K layers in one single output card, 32 4K layers in whole device, Support layer roaming
	No Rectangle Calculating Limitation	✓	
	Output Bit Depth	8bit,10bit, 12bit	
Color Management	Input Color Adjustment	Black level, Contrast, Saturation, Hue, Shadow, Highlight	
	14CH Color Correction	✓	
	Color Replacement	✓	
	3D LUT	Support cube file with 17×17×17/33×33×33/65×65×65	
	Color Curve Editor	✓	
	Output Color Gamut Management	Original color gamut, Standard color gamut(Rec.709, DCI-P3, Rec.2020), Custom color gamut	
Image Quality Improvement	Precise Grayscale	✓	
	22 Bit+	✓	
	Color Management	✓	
	Brightness/Chroma Calibration	✓	
	Full Grayscale Calibration	✓	
	Multi-Mode	✓	
	Thermal Compensation	✓	
	Dynamic Booster	-	
Brightness Overdrive	✓		
Camera Shooting Adaptation	Sync (Active source, Genlock, Internal)	✓	
	Frame Multiplication/Frame Multiplexing	Support 1~6 times multiplication	
	Genlock Phase Offset	Support angle, fraction, absolute	
	Shutter Fit	Support 22.5~360° Adjustment accuracy is 0.001°	
	Low Latency	✓	
Secondary Development Integration	HTTP	✓	
	SNMP	✓	
	Art-Net	✓	

NovaStar Multimedia Player-Taurus Series

Product Function Table (V2.0)

Model	TB30	TB50	TB60	TCC160
Loading capacity(pixel)	650,000	1,300,000	2,300,000	260,000(Single card with 16×HUB75E) 650,000(Cascade receiving cards)
Output	Ethernet Port×1	Ethernet Port×2	Ethernet Port×4	Ethernet Port×1, HUB75E×16
Maximum width/height	Width: 4096 Height: 4096	Width: 4096 Height: 4096	Width: 4096 Height: 4096	Width: 2048 Height: 2048 Ultra long screen Width: 8192 Height: 2560
Video decoder	4K@60Hz, H.265/H.264/VP9	4K@60Hz, H.265/H.264/VP9	4K@60Hz, H.265/H.264/VP9	4K@60Hz
Processing	1GB RAM+32GB ROM	1GB RAM+32GB ROM	1GB RAM+32GB ROM	2GB RAM+32GB ROM
U disk expansion	Up to 128G	Up to 128G	Up to 128G	Up to 128G
Playback videos	2×4K/ 6×1080P/ 10×720P/ 20×360P	2×4K/ 6×1080P/ 10×720P/ 20×360P	2×4K/ 6×1080P/ 10×720P/ 20×360P	1×4K/ 3×1080P/ 8×720P/ 10×480P/ 16×360P
Synchronous Mode (HDMI)	×	✓	✓	-
HDMI Output	×	✓	✓	-
Audio Output	✓	✓	✓	✓
Optional 4G module	✓	✓	✓	✓
Sync method	NTP, Lora, GPS	NTP, Lora, GPS	NTP, Lora, GPS	NTP, GPS
Control mode	Ethernet, WiFi (AP&STA Switchable) 4G Network, USB	Ethernet, WiFi (AP&STA Switchable) 4G Network, USB	Ethernet, WiFi (AP&STA Switchable) 4G Network, USB	Ethernet, WiFi (AP&STA)
Backup	✓	✓ (load half)	✓ (load half)	-
Support NovaCloud	✓	✓	✓	✓
Java SDK	✓	✓	✓	✓
Certification Information	NBTC, IMDA, PSB, FAC DoC, ENACOM, ICASA, SRRC, EAC DoC, EAC RoHS	RCM, UL Smark, CQC, FCC, CE, UKCA, CB, MIC, P	NOM, SIRIM	CE, FCC, RoHS, TBK
Operation System	Android 11	Android 11	Android 11	Android 10

NovaStar LED Interactive Playback & Control Processor-Taurus Ultra Series

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Product Function Table (V2.0)

Model	TU15 Pro	TU20 Pro	TU40 Pro
Loading capacity (Pixel)	2.6 Million	3.9 Million	13 Million
Maximum width&height	Width: 4096 pixels, Height: 1920	Width: 4096 pixels, Height: 1920	Width: 16384 Pixels, Height: 8192 Pixels
Android	Android 11	Android 11	Android 13.0
Wi-Fi	Wi-Fi6 (AP), Wi-Fi5 (Station)	Wi-Fi6 (AP), Wi-Fi5 (Station)	Wi-Fi6 (AP), Wi-Fi5 (Station)
Memory	4GB RAM+32GB ROM	4GB RAM+32GB ROM	8GB RAM+128GB ROM
Input	HDMI1.3×2, USB2.0×3	HDMI1.3×2, USB2.0×3	HDMI 1.3×1, HDMI 2.0×2, USB 2.0×1, USB 3.0×1
Output	Ethernet Port×4, HDMI1.3×1, 3.5mm Audio Output×1, SPDIF×1	Ethernet Port×6, HDMI1.3×1, 3.5mm Audio Output×1, SPDIF×1	Ethernet Port×20, Fiber Output×2, Audio Output×1, SPDIF×1, HDMI 1.3×1
Control	Ethernet Port×1, RS232×1, Sensor×1	Ethernet Port×1, RS232×1, Sensor×1	Ethernet Port×1, Sensor×2, RS232×1
Intelligent broadcast control	Remote, App, USB Drive	Remote, App, USB Drive	Remote, App, USB Drive
Wireless projection	Support Type-C, Wireless USB Adapter, Support Windows / iOS / Android Multiple Platform Mirroring	Support Type-C, Wireless USB Adapter, Support Windows / iOS / Android Multiple Platform Mirroring	Support Type-C, Wireless USB Adapter, Support Windows / iOS / Android Multiple Platform Mirroring
Whiteboard	Support (combined with infrared border)	Support (combined with infrared border)	Support (combined with infrared border)
Phone photo mapping	✓	✓	✓
Intelligent voice control	✓	✓	✓
Free scaling	✓	✓	✓
Image enhancement	✓	✓	✓
Effect adjusting	✓ (Standard, Soft, Theater, Meeting)	✓ (Standard, Soft, Theater, Meeting)	✓ (Standard, Soft, Theater, Meeting)
One-click eye protection	✓	✓	✓
Launcher customization	✓	✓	✓

NovaStar LCD Controller

Product Function Table (V2.0)

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Model	LCB2K	LCB4K
Loading capacity (Pixel)	N/A*	N/A*
Output	1× HDMI 2.0, 1× 3.5mm Audio	1× HDMI 2.0, 1× 3.5mm Audio
Maximum resolution	1920×1080@60Hz, Width: 1920 Height: 1080	4096×2160@60Hz, Width: 4096 Height: 4096
Video decoder	2K@60Hz, H.265/H.264/VP9	4K@60Hz, H.265/H.264/VP9
Processing	1GB RAM+16GB ROM	2GB RAM+32GB ROM
U disk expansion	Up to 128G	Up to 128G
Synchronous Mode (HDMI)	×	×
HDMI Output	✓	✓
Audio Output	✓	✓
Optional 4G module	✓	✓
Sync method	NTP, Lora, GPS	NTP, Lora, GPS
Control mode	Ethernet, WiFi (AP&STA Switchable) 4G Network, USB	Ethernet, WiFi (AP&STA Switchable) 4G Network, USB
Backup	N/A*	N/A*
Support NovaCloud	✓	✓
Java SDK	✓	✓
Certification Information	CE, WPC	CE, WPC
Operation System	Android 11	Android 11

NovaStar Industrial Controller

Product Function Table (V2.0)

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Model	MBOX600 Pro
Loading Capacity	2.6 Million
Maximum Width & Height	Maximum Width: 4096, Maximum Height: 1920
OS	Windows: Windows 10&11 IoT Enterprise, Linux: ubuntu22.04
WiFi	WiFi(Station) , WiFi 5, 2.4G/5G
CPU	Intel® Processor N97
Storage	4G+128G, 8G+256G
Input Ports	1 × HDMI 1.3, 2 × USB 2.0, 2 × USB 3.0
Output Ports	4 × RJ45, 1 × HDMI 1.3, 1 × 3.5mm Audio
Control Ports	2 × Gigabit Ethernet Port, 1 × RS232, 2 × Sensor Port
Free Scaling	Support
SNMP	Support
Remote Control	Support
Certification Information	CE, FCC, UL, RCM, SRR, CB

NovaStar Media Server

Product Function Table (V2.0)

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Model	ET1S-G
Chassis	1U
Memory	16G (DDR4)
Storage	Kingston M.2 high-speed SSD 250 GB
Loading Capacity	4096×2160@60fps
Decoding Capacity	1 × 4K×2K@60fps or 4 × 2K × 1K@60fps
Playback Software	Kompass FX1 Multimedia Playback Software
Number of Programs	Unlimited
Layer Specifications	4 Mixed Layers, 1 Audio Layer
Multi-server Networking	Support
Dual-server Backup	-
Visual Control on Tablet	Support
Protocol Control	Support
Media Type	Video, Audio, Image, PPT, Word, Excel, PDF, playlist collection, capture Device, NDI, Streaming Media, Web Page, Text Subtitles, Digital Clock, Sensors
Certification Information	CE

NovaStar Optical Fiber Converter Product Function Table

Product Function Table (V2.0)



Model	CVT310	CVT320	CVT10-S	CVT10-M	CVT10 Pro-S	CVT10 Pro-M	CVT4K-S	CVT4K-M	CVT8-5GS	CVT8-5GM
Optical module	Multi-mode	Single-mode	Single-mode	Multi-mode	Single-mode	Multi-mode	Single-mode	Multi-mode	Single-mode	Multi-mode
Number of optical ports	1	1	2	2	2	2	4	4	1	1
Optical Fiber Bandwidth	1.25 Gbps	1.25 Gbps	10 Gbps	10 Gbps	10 Gbps	10 Gbps	10 Gbps	10 Gbps	40 Gbps	40 Gbps
Optical Fiber Backup	×	×	OPT1 Primary OPT2 Backup	OPT1 Primary OPT2 Backup	OPT1 Primary OPT2 Backup	OPT1 Primary OPT2 Backup	OPT1&2 Primary OPT3&4 Backup	OPT1&2 Primary OPT3&4 Backup	×	×
Optical fiber format	Multi-mode twin-core LC optical ports	Single-mode twin-core LC optical ports	Single-mode twin-core LC optical ports	Multi-mode twin-core LC optical ports	Single-mode twin-core LC optical ports	Multi-mode twin-core LC optical ports	Single-mode twin-core LC optical ports	Multi-mode twin-core LC optical ports	Single-mode twin-core LC optical ports	Multi-mode 8-core MPO optical ports
Number of network ports	1	1	10	10	10	10	16	16	8	8
Transmission distance	300 Meters	15 Kilometers	10 Kilometers	300 Meters	10 Kilometers	300 Meters	10 Kilometers	300 Meters	10 Kilometers	100 Meters
Network port format	Ethernet Gigabit ports	Ethernet Gigabit ports	Ethernet Gigabit ports	Ethernet Gigabit ports	Neutrik Ethernet Gigabit ports	Neutrik Ethernet Gigabit ports	Neutrik Ethernet Gigabit ports	Neutrik Ethernet Gigabit ports	Ethernet Gigabit ports	Ethernet Gigabit ports
Power Suuply	3-Pin Power Socket	3-Pin Power Socket	PowerCON	PowerCON	PowerCON	PowerCON	PowerCON / 3-Pin Power Socket	PowerCON / 3-Pin Power Socket	PowerCON	PowerCON
Dual power supply backup	×	×	×	×	×	×	✓	✓	×	×
Control method	×	×	Type-B USB	Type-B USB	Type-B USB	Type-B USB	Type-B USB / Ethernet	Type-B USB / Ethernet	Type-B USB	Type-B USB
Number of SFP modules come with the device	1	1	2	2	2	2	4	4	2	2

NovaStar Long-distance 10G Optical Fiber Converter&Controller Combination Table

Product Function Table (V2.0)

Single Fiber Port ~RJ45 Port		Controller Model	MCTRL660 Pro	MCTRL R5	MCTRL 4K	KU20	MX20	MX30	MX40 Pro	VX400	VX600	VX1000	NovaPro UHD Jr	H ₁₆ ×J45+2×fiber sending card	H ₄ ×fiber sending card
Converter Model															
* Sending card support mode:			8B/10B	8B/10B	8B/10B	8B/10B	8B/10B	64B/66B	64B/66B	64B/66B	64B/66B	64B/66B	8B/10B	8B/10B	8B/10B
CVT10-S/M CVT10 Pro-S/M	Support or not	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Valid ports of the converter	1~6Port	1~8Port	1~8Port	1~6Port	1~6Port	1~10Port	1~10Port	1~10Port	1~4Port	1~6Port	1~10Port	1~8Port	1~8Port	1~8Port
CVT4K-S/M	Support or not	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Valid ports of the converter	1~6Port or 9~14Port	1~8Port or 9~16Port	1~8Port or 9~16Port	1~6Port or 9~14Port	1~6Port or 9~14Port	1~10Port	1~10Port or 11~16Port	1~10Port or 11~16Port	1~4Port or 11~14Port	1~6Port or 11~16Port	1~10Port or 11~16Port	1~8Port or 9~16Port	1~8Port or 9~16Port	1~8Port or 9~16Port
Mctrl 660Pro (Fiber Converter Mode)	Support or not	✓	✓	✓	✓	✓	×	×	×	×	×	×	✓	✓	✓
	Valid ports of the converter	1~6Port	1~6Port	1~6Port	1~6Port	1~6Port	×	×	×	×	×	×	1~6Port	1~6Port	1~6Port
VX600 (Fiber Converter Mode)	Support or not	×	×	×	×	×	✓	✓	✓	✓	✓	✓	×	×	×
	Valid ports of the converter	×	×	×	×	×	×	1~6Port	1~6Port	1~4Port	1~6Port	1~6Port	×	×	×
VX1000 (Fiber Converter Mode)	Support or not	×	×	×	×	×	✓	✓	✓	✓	✓	✓	×	×	×
	Valid ports of the converter	×	×	×	×	×	×	1~10Port	1~10Port	1~4Port	1~6Port	1~10Port	×	×	×

NovaStar 10G fiber module types:

- 10G SFP Module-M
- 10G SFP Module-S

*** Fiber converter/Sending card mode description:**

- 8B/10B mode, one fiber transmits 1-8 gigabit network port data at once, 10Gbps
- 64B/66B mode, one fiber transmits 1-10 gigabit network port data at once, 10.3125Gbps

*** Fiber converter mode description:**

- CVT10-S/M, CVT10 Pro-S/M support 64B/66B mode and 8B/10B mode by default
- CVT4K-S/M supports 8B/10B and 64B/66B by DATA_CVT4K_V1.1.0.0(Standard version released)

NovaStar Scientific Grade Calibration System

Product Function Table (V2.0)

Model	C3200
Sensor Resolution	6573×4862
Maximum Frame Rate	1.7 fps
Time consuming for 4K screen	36Min
Luminance Measurement Accuracy	±3%
Chromaticity Measurement Accuracy	±0.003
IP Rating	IP6X Camera body
Communcation Port	Gigabit Ethernet
Input Voltage	100~240v
Operating Enviroment Temperature	0°C~30°C
Operating Enviroment Humidity	20%~70%
Physical Specification	15.6mm×14.7mm×12.8mm
Type	35mm/80mm