

NEON SERIES - Technical specifications

Physical Properties		
Weight (monitor only)	Neon17 Neon24 Neon31 Neon55	4.5kg / 9.92lb 8.6kg / 18.95lb (TBC) (TBC)
Weight (Master Control Unit)	300g	
Dimensions (W x H x D mm)	Neon17 Neon24 Neon31 Neon55	413 x 253 x 71.4mm 594 x 340 x 72.5mm 760 x 430 x 62mm 1274 x 745 x 91mm
Dimensions (Master Control Unit)	151 x 91.5 x 31mm	
Construction	Aluminium alloy chassis with ABS Polycarbonate back plate	
Mounting points	Full ARRI compatible, 3 Left, 3 Right, 7 Top, 7 Bottom; VESA Mount.	
Power		
Operating power	(TBC)	
Power adaptor	(TBC)	
Display		
Size	Neon17 Neon24 Neon31 Neon55	17" 24" 31" 55"
Resolution / PPI	Neon17 Neon24 Neon31 Neon55	1920 x 1080 / 142ppi 4096 x 2160 / 193ppi 4096 x 2160 / 147ppi 3840 x 2160 / 84ppi
Aspect Ratio	Neon17 Neon24 Neon31 Neon55	16:9 17:9 17:9 16:9
Color Gamut	DCI-P3 100% Coverage, D65 or D93 White Point, Calibrated	
Look up table (LUT) support	3D LUTs (.cube format)	
Anamorphic de-squeeze	2x, 1.5x, 1.33x, Panasonic 4:3	
Calibration	Calibration to DCI-P3 with optional calibration unit	
User interface	iOS App via Bluetooth, IR Remote control of focus peaking, exposure, calibration, zoom, waveform monitor, RGB monitor, vector scope	
Dynamic HDR Technology		
Zone Backlights (direct backlight individual LEDs)	Neon17 Neon24 Neon31 Neon55	128 512 512 512
LEDs	Wide Color Calibrated D65 or D95	
Bit Depth	True 10-bit	
Color	DCI-P3 100% coverage	
Brightness	1000nit (+/- 10%)	
Control	Dynamic backlight control	
SDR Monitoring	Native Rec.709, Log/RAW to Rec.709	
HDR Monitoring	Log/RAW to HLG or PQ	
Supported input /Gamma	Sony SLog / SLog2 / SLog3 Canon CLog / CLog2 / CLog3 ARRI Log CEI160 / LogCEI200 / LogCEI250 / LogCEI320 / LogCEI400 / LogCEI500 / LogCEI640 / LogCEI800 / LogCEI1000 / LogCEI1280 / LogCEI1600 Panasonic Vlog JVC JLog1 RED Log3G10 / RED LogFilm FujiFilm F-log PQ10k HLG	
Supported input/Gamut	Sony SGamut / SGamut3 / SGamut3.cine Canon Cinema / DCI P3 / DCI P3+ Nikon NLog Panasonic V Gamut Arri Alexa Wide Gamut Rec709 / BT.2020 JVC RED WideGamut / RED DragonColor / DragonColor2 / RED Color2 / RED Color3 / RED Color4	
Supported input RAW/Gamma	Sony SLog / SLog2 / SLog3 Canon CLog / CLog2 / CLog3 Panasonic Vlog	
Supported input RAW/Gamut	Sony SGamut / SGamut3 / SGamut3.cine Canon Cinema / DCI P3 / DCI P3+ Nikon NLog Panasonic V Gamut	
Video output	Rec.709, HLG, PQ, LUT	

Input Connections	
HDMI	1 x HDMI 2.0b
SDI - SDI Expansion Module required	2 x configurable BNC
Signal	Up to uncompressed true 10-bit
Output Connections	
HDMI	1 x HDMI 2.0b
SDI - SDI Expansion Module required	2 x configurable BNC
Signal	Up to uncompressed true 10-bit
Supported Loop Out Formats	
HDMI to HDMI	720p 50/60, 1080i 50/60, 1080p 24/25/30/50/60/100/120, 4kUHD/4kDCI 24/25/30/50/60
SDI to SDI - SDI Expansion Module required	720p 50/60, 1080i 50/60, 1080p 24/25/30/50/60/100/120, 4kUHD/4kDCI 24/25/30/50/60
HDMI to SDI Note: No simultaneous HDMI out possible	720p 50/60, 1080i 50/60, 1080p 24/25/30/50/60/100/120, 4kUHD/4kDCI 24/25/30/50/60
Dolby Vision Tunnelling	Selectable on HDMI
Supported Codecs & Frame Rates	
Video to ProRes / DNxHR	Apple ProRes RAW, ProRes HQ, 422, LT AVID DNx, HQX, HQ, SQ, LB, Cinema DNG RAW
Resolution / Frame rate	4K DCI / UHD 24/25/30/50/60p 2K 24/25/30/50/60/100/120p 1080p 24/25/30/50/60/100/120/200/240p 1080i 50/60i, 720p 50/60p
Onboard Processing	
Pulldown removal	24/25/30pSF > 24/25/30p (2.2 pulldown) 60i > 24p (3.2 pulldown)
4K DCI > UHD	Yes - Loop-out and playback
4K UHD downscaling	Yes - Loop-out and playback
HDMI	2 or 8ch 24-bit, camera dependent
SDI - SDI Expansion Module required	12ch 48kHz 24-bit
Audio	
Audio in	Line in / Mic in
Headphone out	3.5mm Headphone out 2ch 48kHz 24-bit
Built-in speakers	No
Remote Start/Stop	
HDMI	Auto HDMI Trigger Supported Protocols - Canon, Sony Atomos Open Standard - Panasonic, Nikon, Olympus, Fuji, Leica
SDI - SDI Expansion Module required	SDI trigger camera selectable
Genlock / LTC	Yes - Bluetooth / iOS App
Serial Control	LANC control - Slave RS232
Playback Features	Jog control, slow motion, scheduled, tag-based scheduling
Pre-roll record	HD 8s, 4K 2s
Project Metadata	AtomOS on unit and iOS App input
Supported media	Support for AtomX SSDmini and Master Caddy II with 2.5" SSD/HDD Please visit atomos.com/drives for list of approved drives.
Master caddy dock	2.5" SATA to USB 2.0/3.0/USB-C 3.1
Supported applications	All popular NLE applications, 3D applications
Metadata tagging	Yes (10 tags available)
XML support	FCPX XML native, FCPX/Adobe limited supported with 3rd party conversion tools
What's in the Box	
Included	Neon Series Unit, Master Control Unit, IR Remote, Master Caddy II x1, AC power supply, AtomX SDI Expansion Module, Road Case, Feet, Quick Start Guide
Optional extras	Atomos HDMI cables, Master Caddy Dock, X-Rite, iDisplayPro calibration
Warranty	1 year Extended to 3 years on product registration

Please note: Specifications are subject to change without notice. All information correct at time of publishing.