



# nVisor MH60 Detailed Datasheet Rev A

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## Product Specifications

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### Optical

FOV, Vertical	34.4 °
FOV, Horizontal	43.6 °
Shape Of View (SOV) Type 1	Full Rectangular (Type 1)
Overlap	100
Pupil Size	9, Non-Real mm
Eye Relief	23 mm
Geometric Distortion	+15% Maximum (Pincushion)
Accommodation (Fixed Or User Adjustable Range)	0 diopter
Convergence Angle	0 °
Dipvergence (Vertical Misalignment)	4 MAX MOA
Brightness (MAX)	30 fL
Brightness Levels	10, 14, 18, 22, 26, & 30 fL
Chromaticity (X)	.313
Chromaticity (Y)	.329
Contrast (Min.)	100:1
Image Defect Criteria	<a href="#">See document 102458</a>
Spatial Resolution	2.1 arcmn/pxl

### Microdisplay

Display Technology	Color Sequential, LCOS (Reflective)
Resolution	SXGA 1280 x 1024
Pixel Format	13.62 micron square pixels (field sequential R G B)
Color Depth	24-BIT (8 bits per R,G,B)

### Video

Video Input Format	SXGA 1280 x 1024 @ 60 Hz
Video Interface	Digital over DVI-D: Left and Right channels or Analog over VGA: Left and Right channels
VCU Interface	Mates with NVIS external Video Control Unit through umbilical independent Left & Right LVDS cables with safety power lock for Stereo / Mono operation.
Monitor Out	Digital over DVI (1X) Analog over VGA (1X)
Latency	<16.7 ms
Video Image Quality	No visible artifacts, noise or abnormalities

## Controls

On/Off Control	Power (Push Button)
Brightness Control	Brightness buttons cycle through pre-set levels
Display Configuration Control	4DD SxProg over RS232; Rocker switch toggles between Left and Right channels
Interpupillary Distance (IPD) Range	53 to 72 (Independent left and right) mm
Eye Relief Adjustment Range	±14 mm
Vertical Adjustment Range For Head Fitting	±14 mm

## Indicators

Power On/Off Indicator	1x Green LED on power button 1x Green LED on back panel
Sync (video Signal) Indicator	Sync indication via LCD panel for both Left and Right channels

## Power

Power Consumption (TYP)	20 W
Power Supply	AVCU-S ROHS(103424): INPUT: 100-240 VAC 1.5 A 50-60 Hz. OUTPUT: +12 V DC 5.5 A AVCU-S W/ BATTERY ROHS(103426): INPUT: 100-240 VAC 1.4 A 50-60 Hz. OUTPUT: +24 V DC 2.5 A
Power Source	100-240 VAC, 50-60 Hz, 0.4 A (IEC Type C13 Cord)
Power Input	AVCU-S ROHS(103424): +12V DC, 5.5A WITH EXTERNAL AC ADAPTER 2.5 mm POWER JACK AVCU-S W/ BATTERY ROHS(103426): +24 VDC, 2.5A WITH EXTERNAL AC ADAPTER 2.1 mm POWER JACK

## Physical

Size (envelope)	4.4 L x 7.9 W x 6.2 H max in
Mass	955 g
Color	Black and Pale Blue
Cable Exit	Rear sides of display module.
Cable Length	4.7 m
Cable Minimum Bend Radius	1 in
Cable Makeup	2x LVDS cables in braided nylon sleeve
Trackers Supported	IC3, IC2+, Ascension, and Polhemus.
Tracker Mounting	External; Two mounting holes on left and right rear of housing.
Logo, Labels, Markings	One part number label and one serial number label located on the exterior of the unit.

## Environment

Operating Temperature Range	0 to 30 °C
Operating Humidity Range	90% Relative Humidity, Non-condensing, 240 hours

Storage Temperature Range

-20 to 60 °C

Storage Humidity Range

90% Relative Humidity, Non-condensing, 240 hours

## **Compliance**

RoHS Compliance

RoHS Compliant

# Drawings

