

# MDP-471/4

## 28" fan-less LCD main display for air traffic control (ATC)



#### **Unequaled image quality**

MDP-471/4 always features the latest LCD panel technologies, presenting an ergonomic solution for ATC controller workstation positions. The **4 megapixel IPS-Pro LCD** screen offers brightness uniformity in white, gray, and black images and ensures zero bright dot defects. A wide viewing angle, high contrast, and absolutely no reflection help you observe every track, enhance user comfort and reduce eye fatigue.

#### Unique design

The **fan-less** design of the 2Kx2K main display ensures **noiseless** operation in an open architecture for improved operator comfort. All **cables** are **hidden** and connectors are easily accessible. The display's **slim design, low weight and mechanical flexibility** provide control center designers with a new degree of freedom to reduce plant and energy costs.

Tower (TWR) option: provides higher brightness, and an even more slim design, for ATC tower use.

Touchscreen (TS) option: adds a multi touch PCAP touchscreen.

#### **Green performance**

MDP-471/4 displays use mercury free and energy saving **LED backlights**, reducing power consumption by 20%. The displays produce no heat and feature near-zero energy consumption when not in active use.

### **Smart obsolescence management**

MDP-471/4 has an extremely **low life-cycle cost**. It has been built with highly reliable components and comes with a 5-year warranty.



Since its introduction in 2000, the 2Kx2K main display for ATC controller working positions has become the world's leading ATC display both in new installations and as a direct replacement for the Sony DDM CRT display.



Product specifications	
Resolution	2048 x 2048 pixels
Pixel pitch	0.246 x 0.246 mm
Active screen area	503.8 x 503.8 mm (19.83 x 19.83 ")
Active screen diagonal	712.4 mm (28.05")
Pixel arrangement	RGB vertical stripe, IPS-Pro technology
Pixel defect	zero bright dot
Backlight	Edge LED backlight system
LED lifetime	> 100,000 hours
Brightness	150 cd/m² calibrated and stabilized, uncalibrated brightness typical 375 cd/m² TWR option: 500 cd/m²
Backlight output Stabilization (BLOS)	yes (real-time feedback loop through continuous measurement) Backlight aging compensation
Dimming ratio	> 100:1
Contrast ratio	Typically 1500:1 - ratio of white/black image ; min 1200:1
Noise level	NA passive cooling only
Display colors	16.7 Mio (24 bit)
Color temperature	Adjustable between native, D65 and custom
Viewing angle	Superwide viewing angle performance, 178 ° typical, with CR greater than or equal to 10
	White brightness uniformity 80% (min)
Uniformity	Black brightness uniformity 70% (typ)
Reflection	Close to zero reflection due to NO front glass
Front glass	Optional
Response time	Tr (black to white transition): 10 ms, typical Tf (white to black transition): 8 ms, typical
Video inputs	4 digital input connectors, 2 x DVI-D Dual link, 2 x DisplayPort
Digital multisync	Support standard VESA resolution lower than its maximum resolution Resolutions lower than native will be displayed in letterbox format Graphic cards scale up is supported (showing low resolution boot content on full 2K LCD surface)
Power supply	Nominal voltage: 110 Vac & 230 Vac, operates between: 90-264 Vac, Frequency range: 47-63 Hz
Power consumption	31 Watt (in typical area control center setting: 70 cd/m²) 41 Watt (stabilized at 150 cd/m²) 72 Watt (TWR version: 500 cd/m²) Power connector type: IEC Power consumption low DPMS: 1.9 Watt (monitoring all digital inputs) Power consumption soft off: 0.5 Watt
Control possibilities	Front control buttons control multilanguage on-screen display USB control box with rotary push button Remote serial control (full 9 wire RS-232 compatible) for display protocol Remote serial DDM protocol (RS422 on DSUB 15 pin connector) Network - DHCP / Stat IP / SNMP / Web interface Integrated USB hub - USB upstream port (1x)(connects workstation) - USB downstream port (2x) (connects pheriphical devices) GPIO - general purpose input/output (3 input / 3 output, open collector)
Options	<ul> <li>optional protective front filter glass with high quality anti reflective treatment</li> <li>DPS version: Dual Power Supplies</li> <li>TWR version: High Brightness (500 cd/m²) for tower use</li> <li>TS version: PCAP touchscreen, multi (10) touch</li> <li>optional Analog Input: RGB HS VS: contact Esterline.</li> </ul>
Dimensions	Desktop version         TWR version           HxWxD: 585x561x135 mm         HxWxD: 558.3x538.5x100.1mm           Bezel width: - top: 39 mm         Bezel width: - top: 25mm           - bottom: 39 mm         - bottom: 25mm           - left: 27 mm         - left: 15mm           - right: 27 mm         - right: 15mm
Mounting	VESA 100x100 and 200x100, M4
EMI / EMC	EU/IEC/Canada/FCC: limit B
Safety	IEC60950-1, EN60950-1, UL60950-1, cUL60950-1, CCC, KCC
Operating temperature	0°C to 40°C (32°F to 104°F)
Humidity	90% at 40°C non-condensing atmosphere (operational and non-operational)
Accessories	Desktop stand main display series (partnr: K93020681A) USB control box (partnr: K5030141) - USB cable 3m (partnr: B5580244) Vesa Interface place (partnr: K6062426) - Maintenance training

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