

ISIS

2K x 2K LED backlit ATC display



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

The 4 MegaPixel LCD displays and graphics controllers of the ISIS family combine performance, low life cycle cost, user comfort and eco-friendliness into an innovative visualization architecture. ISIS always features the latest LCD panel technologies presenting an ergonomic solution for ATC controller workstation positions. ISIS displays use mercury-free and energy-saving LED backlights, reducing power consumption by 20%. Its screen has real-time controlled brightness, which results in more detail, enhanced user comfort and less eye-fatigue.

ISIS displays are highly redundant (4 backlight trays with 3 LED drivers each), do not require regular replacements and have an extremely low life cycle cost. The backlight tray is connector based (no fragile wires to disconnect), so maintenance is very easy. The display's low weight, low power, small volume, high brightness and mechanical flexibility provide control center designers with a new degree of freedom to reduce plant and energy costs and improve operator comfort and performance.

Why choose ISIS:

- Low life cycle cost
- Outstanding visual performance
- Flexible implementation
- Extensive manufacturing capabilities
- Long-term support
- Worldwide acceptance
- Small ecological footprint

BARCO

Visibly yours

Technical specifications ISIS

GENERAL

- Active display area: 503.8 x 503.8 mm (19.83 x 19.83 inch)
- Active screen diagonal: 712.4 mm (28.05 inch)

OPTICAL

Luminance

- Peak brightness: > 300 cd/m²
- Brightness: 240 cd/m² calibrated
- Dimming ratio: typically 100:1

Contrast ratio

- min 700:1 – typically 1000:1 in dark environment
- Front glass with high quality anti-reflective treatment

Color performance

- Color temperature: adjustable between native, D65 and custom
- Display colors: 16.7 Mio (24bit)
- Pixel arrangement: RGB vertical stripe

Optical performance

- Hor. & vert. pitch: 0.246 mm (103 px/inch)
- Active screen area: 2048 x 2048 pixels (4.2 MP)
- Response time (typical):
 - Tr (black to white transition): 14.5 ms, max 17 ms
 - Tf (white to black transition): 4.8 ms, max 13 ms
- Viewing angle: Hor. & vert. (min.) ±85° typical
- Removable backlight system: 4 identical trays - field replaceable
- LED Backlight lifetime: > 100.000 hours

INTERFACING

Video inputs

- Modular input system; up to 3 inputs can be installed
- 1 analog input / up to 3 DVI inputs
(Multiple analog inputs using serial controlled video switch)
- Input selection by control system or via serial commands

Analog RGB

- Connector type: 5 x BNC
- Termination: R,G,B 50 Ohm; HS, VS 75 Ohm
- Signal standard: 0.714V p-p
- Resolution: 2048 x 2048 - 60 Hz
- Timing: hor. frequency 126.84 kHz
- Sony DDM compatible
- Other details on request

DVI

- Modular modules
- Connector type: DVI Panellink
- Resolution: 2048 x 2048 - 60 Hz
- Dual Link DVI
- Multisync capability

DDM BITE Compatibility

- Video input and DB15 BITE interface

CONTROL POSSIBILITIES

- Front control module / OSD
- Maintenance keypad
- Remote serial control
- Front Control module also available separately to be integrated into the controller working position.

AUTOMATIC FUNCTIONS

- Automatic Phase Adjust (APA)
- Backlight aging compensation
- BLOS = backlight optical stabilization
(real-time feedback loop through continuous measurement)
- Auto mains voltage adapt
- Auto amplitude (during setup)
- Auto stand by (if enabled)

ELECTRICAL

Power supply

- Nominal voltage: 115 Vac & 230 Vac
- Operates between: 90-264 Vac
- Frequency range: 45-65 Hz

Power consumption

- Pnom is typ 120 Watt (150 cd/m)
- Pmax is typ 150 Watt (240 cd/m)
- Power connector type: IEC
- Optional: Dual Power supply for redundancy

MECHANICAL

Chassis version

- HxWxD: 595 x 595 x 150 mm (23.42 x 23.42 x 5.9 inch)
- Weight: 19.8 kg (44 lbs)

Panel-mount version

- HxWxD: 595 x 595 x 150 mm (23.42 x 23.42 x 5.9 inch)
- Including bezel: HxWxD: 659x668x158 (25.9 x 26.2 x 6.22)
- Weight: 22 kg (48.2 lbs)

Desktop version

- HxW: 659 x 668 mm (25.9 x 26.2 inch)
- Weight: 32 kg (71 lbs)

ENVIRONMENTAL

Temperature

Operating: 10°C to 40°C (50°F to 104°F)

EMI/EMC

- EN55024 which covers : EN61000-4-2,3,4,5,6,11,8
- EN55022
- FCC TITLE 47 part 15 class A
- CES-003

Safety

- UL60950-1 1st edition
- CSA C22.2 No. 60950-1-03 1st Edition
- IEC60950-1 1st edition
- CE, CCC

INPUT MODULES

- Analog / DVI

OPTIONS

- Protective Front filter flavors (Contact Barco for alternative solutions)
- Spare backlight tray set
- Mechanical conversion kits
- Fine dust filter
- Maintenance training
- Dual Power supply support
- Extended warranty services
- Backlight replacement program

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Barco is an ISO 9001 registered company.
The information and data given are typical for the equipment described. However any individual item is subject to change without any notice.
The latest version of this product sheet can be found on www.barco.com

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