

## Intelligent Display Unit

### Epsilon Color Lift Display

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Epsilon Color 5.5-ST

Epsilon Color is used as a landing display and inside elevator cars to display direction information, floor numbers and other information for passengers.

The unit comprises a Graphical Color liquid crystal display and a CPU with two communication ports and a control for two external lanterns.

Epsilon Color offers a wide range of features to meet customer's requirements:

- Customizable 5,5 inch Color LCD with 18-bit digital color (262 144 colors)
- High brightness
- 6,5, 10,4 and 12,1 inch displays available as an option
- High reliability, verified by an accelerated aging test
- Slim design saves valuable space
- SPI and RS232 communication
- Ethernet communication with TCP/IP protocol as an option
- Multi-frequency gong control
- External lantern control
- Cost-effective design
- Flexible SW design
- Processing capacity enables running of intelligent applications
- Small power consumption

# SPECIFICATION

## Architecture

Processor: Motorola MPC850

## Display Controller

The display controller is Fujitsu MB87J2020 "Jasmine"

- Embedded 1 MB SDRAM display memory
- 2D graphics accelerator
- 18-bit digital color
- Hardware anti-alias feature (creates smooth texts)

## Display

NEC NL3224BC35-20 5,5" TFT Color Display  
Resolution 320\*240 dots, 262,144 colors  
Contrast ratio 400:1 (typ.)  
Luminance 400cd/m<sup>2</sup> (typ.)  
Replaceable lamps for back light

## Audible Gong

Tone 1, 1200 Hz  
Tone 2, 1000/833 Hz  
Tone 3, 1200/1000/800 Hz  
Gong volume adjustable 35-70dB (bare board)

## Interfaces

SPI  
Baud Rate: 1-20 kBaud  
Connector: Molex 5268-NA-5 (SPOX)

RS-232  
TxD, RxD and GND  
Baud Rate: max 115200, connector: 2.54 mm pitch 3-pin header

Ethernet option  
Up to 10 MBit with TCP/IP protocol using optional small interface card that is equipped with transformer and RJ45 connector

## Lantern Outputs

2 X Lamp Output  
Current Maximum: collectively limited by 250mA resetting thermofuse  
Each output limited by 100mA resetting thermofuse

## Memory

RAM memory: 16MB SDRAM  
Program memory: 32MB on-board Flash ROM

## Power Supply

Input Voltage: 24 VDC ±25%  
Current typical: 350 mA (no gongs, no lamps)  
Current limited by 0.75A thermofuse

## Environmental Specifications

Operating Temperature: 0 ... +50C  
Storage Temperature: -30 ... +80C  
Humidity: 95% @40C non-condensing  
Vibration: IEC 60068-2-6-Fc  
EMC emission: EN 12015 (1998)  
EMC susceptibility: EN 12016 (1998)

## Mechanical Specifications

PCB: 145 (W) x 105 (H) x 10 (D) mm  
Display: 134 (W) x 105 (H) x 13 (D) mm  
Inverter: 94 (W) x 34 (H)

The PCB and display may be used either with the display mounted on top or with the units mounted side by side. The display is connected to the Epsilon Color PCB with a flexible flat cable and an inverter cable.

## Software

The panel has embedded Linux operating system. The application can be programmed with standard Linux tools or it may be generated using GOP software. Graphical GopTool design SW provides a complete, well-tested and reliable environment.

The GOP software has an effective event driven architecture optimised for fast display updates and operation in process control. It also has a built-in support for unlimited number of languages including oriental languages like Chinese. The font system allows user to use any fonts installed into windows scaled to any size.

## Ordering reference

10217 Epsilon Color Lift Display



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