

Application

The variable message sign is a useful media to alert motoway users when there are abrupt changes in traffic patterns, road conditions, emergencies or special events. The application of VMS on the road can improve traffic flow while ensuring the safety of drivers and passengers. Variable message signs are ultra-bright and highly legible, with a variety of functions for many applications: lane closure, highway/tunnel construction, work zone, parking lot guidance, and etc.

Specification

VMS Model	VMS10M-176x128-RGB
Standard	EN 12966:2014, EN 12966-1:2005 +A1:2009
Display Specifications	
Pixel Pitch (mm)	10
LED Matrix	3in1 RGB SMD LED per pixel
LED Composition	SMD + Lens
Display Area (HxW mm)	1,760 X 1,280
Screen Resolution (HxW pixels)	176 X 128
Basic LED Module Size (HxW mm)	160 X 320
Basic LED Module Dots (HxW pixels)	16 X 32
Quantity of LED Modules (HxW pcs)	11 X 4 = 44
Size of the whole VMS (HxW mm)	1,960 X 1,480
Display Color	Full Color
Font Support	Vietnamese/English(Unicode)
Optical Characteristics	
Conformity	EN12966 Compliance (L3/L3*/R3/C2/B6/T1/T2)
Beam Width	EN12966 Class B6 (H: ±15°, V: -10°)
Luminance	EN12966 Class L3/L3* (Red: ≥ 3100 cd/m², Green: ≥ 3720 cd/m², Blue: ≥ 1240cd/m², Yellow: ≥ 7440 cd/m², White: ≥ 12400 cd/m²)
Contrast Ratio	EN12966 Class R3
Color	EN12966 Class C2
Physical Characteristics	
Cabinet Material	Aluminum
Enclosure surface	Powder coated for Exterior of the Cabinet
Power coated Color	Front Matte Black(RAL9005)+BackSand Grey(RAL7042)
Working Temperature	T1, T2 (-25°C ~ + 60°C)
Humidity Range	99% RH
Mechanical Protection	IP 66
Maintenance	Back Maintenance
Electronic Specifications	
Working Voltage	110V~230V AC (50±1Hz)
LED lifespan	≥ 100,000 hrs
Max Power Consumption @12,400 nits	≤ 602W
Average Power Consumption	≤ 232W
Brightness Control	100 levels Auto/Manual Control
Internal maintenance Lighting	Yes
Integrated watch-dog circuit	Yes
High-temperature VMS sign warning	Yes
High-temperature VMS sign error alert	Yes
Power error detection	Yes
Image sensor error detection	Yes
Pixel error detection	Yes
Communication failure detection	Yes
Detect open door	Yes
Remote VMS sign power on/off control	Yes
Pixel fault position and color detection	Yes
API/SDK Support	Yes
Communication	RS232/RS485(DP9), Ethernet (2 x 10/100BASE-T/TX RJ-45)
Control Protocol	TCP/IP, NTCIP
Network Protocol	NAT, OSPF, IGMP, SMTP, SMTPS (Optional)
Secure Communication Protocol	GRE, IPSec, SSL (Optional)

Reference