

LED Information Display

GSO

GSO series information displays are digital LED information displays specially designed for public transport stops and terminals. The full matrix LED displays provide a flexible solution for passenger information systems providing up-to-date information to passengers. Designed without front cover glass for maximum colour reproduction. Various mounting options.



Features

LED Technology

LED full-matrix technology allows freely configurable display layout. Full graphical display with fine pixel pitch 2.5 or 3.9 mm perfectly displays text, graphic symbols, images, videos, websites and live broadcasts.

- High brightness display guarantees excellent readability even in direct sunlight.
- Fully graphic display shows public transport information, train and bus departures, general passenger information as well as advertising messages and other multimedia.

Information System

Possibility of making the display as an autonomous display element or as part of larger information system.

- Management by an external master computer makes tracking and controlling easier.
- Power and runtime data are automatically monitored.

Mechanical Design

- Stable construction made of laser-cut and bent aluminium sheets and profiles, frame color on customer's request.
- Without front glass for excellent contrast and color reproduction, complete reduction of reflections, better cooling and lower weight.
- Flexible dimensions.
- Ceiling, wall bracket or wall surface mounting. Customized solution on request.
- Single sided or double sided design.
- Possibility to implement extra digital clock, analogue clock, platform number or fixed description.
- Cooling is ensured by inner temperature active cooling with fans with fault detection.
- Easy access to all internal modules after tilting front panel makes easier to check up and replace internal parts.

Operation

- The display is designed for reliable usage 24/7 in outdoor conditions.
- Choose from two types of modes according displays usage.

Text-to-Speech Module

Specially developed module for visually handicapped person.

- The module provides the necessary information via synthetic voice output from 8W speakers.

Various Areas of Use



Public Transport and Bus Stops



Train Stops and Stations



Railway Stations



LED Technology



Full Color RGB Display



Usage 24/7



Brightness up to 5 500 cd/m²



Management and Monitoring System



Integrated Temperature Control



Option WiFi, LTE or Fiber Optics



Text-To-Speech Module



Suitable for Outdoor Use

Technical Parameters

GSO.		25	25a	39
Module Specifications	pixel pitch [mm]		2.5	3.9
	resolution [px]	100 × 100	128 × 64	64 × 64
	size [mm]	250 × 250	320 × 160	250 × 250
	brightness	4 500 cd/m ²	5 000 cd/m ²	5 500 cd/m ²
	viewing angle		±70° × ±60°	
	frame frequency		50 Hz	
	refresh rate		1 920 Hz	
	color depth		24 bit	
	contrast		3 000:1	
	life span		≥ 100 000 hours (70% brightness)	
Mechanical Construction	frame	laser-cut and bent aluminium sheets		
	glass	without front glass		
	service access	tilting front panel secured by industrial locks		
	cooling	inner temperature-controlled active cooling, fans with fault detection		
	dimensions [mm]	by screen size, see Indicative dimensions table		
	protection degree	IP 54		
	max. size of active display area [m] W × H	2.75 × 1 ¹	2.88 × 0.96	2.75 × 1 ¹
	noise level	max. 57 dB – at maximum cooling system power		
Temperature Management	temperature	-20 to +40 °C		
	humidity	10 to 90 % (without condensing)		
	max. intensity of solar radiation	1 120 W/m ²		
Power	power voltage	100–240 VAC, 50–60 Hz		
	max. power consumption	45 W/ module MAX, 15 W/ module AVG	30 W/ module MAX, 10 W/ module AVG	27 W/ module MAX, 7 W/ module AVG
Mounting	standard	ceiling suspension, wall bracket, wall surface mounting		
	on request	customized solution		

Note

¹ Possibility to make information display without cover glass made of cabinets, where there is no size limit. Dimensions must be in multiples of 0.5 x 0.5 m.

Basic Font Set

GSO.25 / GSO.25a

Name		Standard 5/7	Bold 6/7	Narrow 4/7	Standard 6/10	Narrow 6/12	Arial 9/11	Arial 11/13	Arial 15/17	Arial 17/19	Arial 25/27
Max. character size (including gaps) [px] A × B		6 × 10	7 × 10	5 × 10	7 × 14	7 × 10	8 × 14	12 × 18	16 × 27	18 × 30	26 × 42
Height of capital letter [mm] C		18.8	18.8	18.8	26.3	31.3	28.8	33.8	43.8	48.8	68.8
Readability DIN1450 [m]		8	8	8	12	13	12	14	18	20	28
Readability TSI-PRM [m]		5	5	5	7	8	7	8	11	12	17
Number of characters per line (1 module)	GSO.25	16.7	14.3	20.0	14.3	14.3	12.5	8.3	6.3	5.6	3.8
	GSO.25a	21.3	18.3	25.6	18.3	18.3	16.0	10.7	8.0	7.1	5.0
Max. number of rows per module	GSO.25	10.0	10.0	10.0	7.1	10.0	7.1	5.6	3.7	3.3	2.4
	GSO.25a	6.4	6.4	6.4	4.6	6.4	4.6	3.5	2.4	2.1	1.5

Possibility to add font on customer's request

GSO.39

Name		Standard 5/7	Bold 6/7	Narrow 4/7	Small 4/6	Standard 6/10	Narrow 6/12	Arial 7/9	Arial 9/11	Arial 15/17	Arial Bold 9/11
Max. character size (including gaps) [px] A × B		6 × 10	7 × 10	5 × 10	5 × 7	7 × 14	7 × 18	8 × 14	10 × 18	16 × 27	10 × 18
Height of capital letter [mm] C		25	25	25	22	37	45	33	41	64	41
Readability DIN1450 [m]		10	10	10	9	15	18	13	16	26	16
Readability TSI-PRM [m]		6	6	6	6	9	11	8	10	16	10
Number of characters per line (1 module)		10.7	9.1	12.8	12.8	9.1	9.1	8.0	6.4	4.0	6.4
Max. number of rows per module		6,4	6,4	6,4	9,1	4,6	3,6	4,6	3,6	2,4	3,6

Possibility to add font on customer's request



Order Reference

1 Model

GSO.25	25
GSO.25a	25a
GSO.39	39

2 Number of Pixels Horizontally

GSO.25 (100 px per module)	200–1100
GSO.25a (128 px per module)	256–1152
GSO.39 (64 px per module)	128–704

3 Number of Pixels Vertically

GSO.25 (100 px per module)	100–400
GSO.25a (64 px per module)	64–384
GSO.39 (64 px per module)	64–256

4 Display Color

Full color RGB display	RGB
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5 Design

Single sided	N
Double sided	D

6 Mounting

Ceiling suspension	S
Ceiling suspension with additional fastening on side of the display	SB
Ceiling suspension with additional fastening on left side of the display	SL
Ceiling suspension with additional fastening on right side of the display	SR
Wall surface mounting	N
Wall bracket	B
Wall bracket with additional fastening on left side of the display	BL
Wall bracket with additional fastening on right side of the display	BR
Customized solution on request	Z

7 Cover Glass

Without front glass	O
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8 Options
(if more than one options is selected, include the extension code in order indicated separated by dot)

Fixed description (number indicates specific design)	Px
Digital clock	CLK
Analogue clock	ACLK
Analogue clock with seconds hand	ACLKS
Platform number	Nb
Text-to-Speech module with 8W speaker and receiver for visually handicapped	TTS
Interface Ethernet	LAN
Interface RS 485	RS485
Interface WiFi	WiFi
Interface LTE	LTE
Interface fiber optics	FO

9 Frame Color

Matte black	RAL9005
Light grey	RAL7040
Blue	RAL5003
Frame color on request	RALxxxx

Order example:

GSO.25.1000.200.RGB.N.N.O.CLK.TTS.RS485.RAL5003

GSO	1	2	3	4	5	6	7	8	9
	Model	Number of Pixels Horizontally	Number of Pixels Vertically	Display Color	Design	Mounting	Cover Glass	Options	Frame Color

Accessories

Holders:

1	Holder		
	Wall holder	WH.F	
2	Model		
	GSO.25	GSO.25	
	GSO.25a	GSO.25a	
	GSO.39	GSO.39	
3	Number of Pixels Horizontally		
	GSO.25 (100 px per module)	200-1100	
	GSO.25a (128 px per module)	256-1152	
	GSO.39 (64 px per module)	128-704	

4	Number of Pixels Vertically		
	GSO.25 (100 px per module)	100-400	
	GSO.25a (64 px per module)	64-384	
	GSO.39 (64 px per module)	64-256	

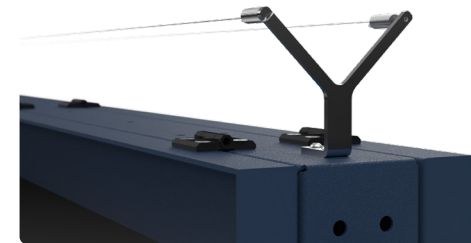
5	Options		
	Fixed header (number indicates specific design)	Px	
	Digital clock	CLK	
	Platform number	Nb	

6	Frame Color		
	Matte black	RAL9005	
	Light grey	RAL7040	
	Blue	RAL5003	
	Frame color on request	RALxxxx	

Other:

Accessories

Protection against birds GSO.BP



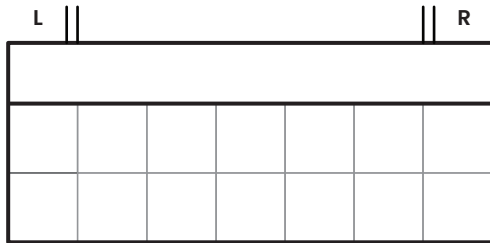
Order example
for display GSO.25.1000.200.RGB.N.N.O.CLK.TTS.RS485.RAL5003:

WH.F.GSO.25.1000.200.CLK.RAL5003

1	2	3	4	5	6
Holder	Model	Number of Pixels Horizontally	Number of Pixels Vertically	Options	Frame Color

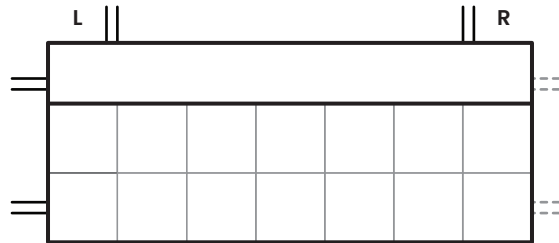
Mounting

Ceiling Suspension



Order reference: **S**

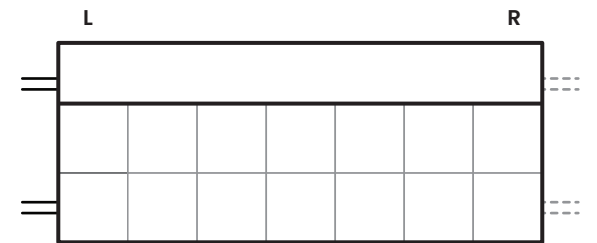
Ceiling Suspension
with Additional Fastening on Side of the Panel



Order reference for Single Sided: **SL / SR**

Order reference for Double Sided: **SB**

Wall Bracket
(with Additional Fastening on Side of the Panel)



Order reference for Single Sided: **BL / BR**

Order reference for Double Sided: **B**

Get in Touch



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LE-801329.06-GSO Outdoor LED Full Matrix Information Display-240920

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We are a traditional Czech company operating in the field of timekeeping and display technology. Our success is evidenced by our continuous growth, both in terms of company size and expansion of our product range or export abroad.

Since 1995 we have been a member of the international holding MOSER-BAER AG and our products under the prestigious MOBATIME brand are exported all over the world.

