

LED Information Displays GTO

The GTO 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 information systems that provide passengers not only with up-to-date data, but also with various images, videos, web pages, informative text and graphic symbols. Thanks to a special Text-to-Speech module, our information systems can also be used by the visually handicapped person. The necessary traffic information is provided to them via synthetic voice output. The GTO series information displays are available in various sizes and designs.



Features

LED Technology

LED full-matrix technology allows freely configurable display layout. Full graphical display with fine pixel pitch 1.8, 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 aluminium profiles nad laser-cut sheets, frame color on customer's request.
- Single layer (ESG) or double layer laminated safety glass (LSG), anti-reflective coating.
- 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

GTO.		18s	25	25a	39
Module Specifications	pixel pitch [mm]	1.8	2.5		3.9
	resolution [px]	135 × 135	100 × 100	128 × 64	64 × 64
	size [mm]	250 × 250		320 × 160	250 × 250
	brightness	3 500 cd/m²	4 500 cd/m²	5 000 cd/m²	5 500 cd/m²
	viewing angle	±70° × ±60°			
	frame frequency	50 Hz			
	refresh rate	1 920 Hz			
	color depth	24 bit			
	contrast	5 000:1	3 000:1		
	life span	≥ 100 000 hours (70% brightness)			
Mechanical Construction	frame	aluminium profiles and laser-cut sheets			
	front glass	single layer glass or double layer laminated safety glass, with anti-reflective coating			
	service access	cover with front glass			
	cooling	inner temperature-controlled active cooling, fans with fault detection			
	dimensions [mm]	by screen size, see Indicative Dimensions Table			
	protection degree	IP 54			
	max. site of active display area [m] W × H	2.25 × 1	1.92 × 0.96		2.25 × 1
	noise level	max. 67 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/m²			
Power	power voltage	100–240 VAC, 50–60 Hz			
	power consumption	38 W/ module MAX, 11 W/ module AVG	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			

Basic Font Set

GTO.18s										
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 x 10	7 x 10	5 x 10	7 x 14	7 x 10	8 x 14	12 x 18	16 x 27	18 x 30	26 x 42
Height of capital letter [mm] C	13.5	13.5	13.5	18.9	22.5	20.7	24.3	31.5	35.1	49.5
Readability DIN1450 [m]	5	5	5	8	9	8	10	13	14	20
Readability TSI-PRM [m]	3	3	3	5	6	5	6	8	9	12
Number of characters per line (1 module)	22.5	19.3	27.0	19.3	19.3	16.9	11.3	8.4	7.5	5.2
Max. number of rows per module	13.5	13.5	13.5	9.6	13.5	9.6	7.5	5.0	4.5	3.2

Possibility to add font on customer's request.

GTO.25										
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 x 10	7 x 10	5 x 10	7 x 14	7 x 10	8 x 14	12 x 18	16 x 27	18 x 30	26 x 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)	16.7	14.3	20.0	14.3	14.3	12.5	8.3	6.3	5.6	3.8
Max. number of rows per module	10.0	10.0	10.0	7.1	10.0	7.1	5.6	3.7	3.3	2.4

Possibility to add font on customer's request.



Basic Font Set

GTO.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 x 10	7 x 10	5 x 10	7 x 14	7 x 10	8 x 14	12 x 18	16 x 27	18 x 30	26 x 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)	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	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

GTO.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 x 10	7 x 10	5 x 10	5 x 7	7 x 14	7 x 18	8 x 14	10 x 18	16 x 27	10 x 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



Indicative Dimensions Table

Dimensions are in mm.

GTO.18s		Number of Modules Horizontally / Pixels							
		2 270	3 405	4 540	5 675	6 810	7 945	8 1 080	9 1 215
No. of Modules Vertically / Pixels	1 135	500 250	750 250	1 000 250	1 250 250	1 500 250	1 750 250	2 000 250	2 250 250
	2 270	500 500	750 500	1 000 500	1 250 500	1 500 500	1 750 500	2 000 500	2 250 500
	3 405	500 750	750 750	1 000 750	1 250 750	1 500 750	1 750 750	2 000 750	2 250 750
	4 540	500 1 000	750 1 000	1 000 1 000	1 250 1 000	1 500 1 000	1 750 1 000	2 000 1 000	2 250 1 000

Dimensions are in mm.

GTO.25		Number of Modules Horizontally / Pixels							
		2 200	3 300	4 400	5 500	6 600	7 700	8 800	9 900
No. of Modules Vertically / Pixels	1 100	500 250	750 250	1 000 250	1 250 250	1 500 250	1 750 250	2 000 250	2 250 250
	2 200	500 500	750 500	1 000 500	1 250 500	1 500 500	1 750 500	2 000 500	2 250 500
	3 300	500 750	750 750	1 000 750	1 250 750	1 500 750	1 750 750	2 000 750	2 250 750
	4 400	500 1 000	750 1 000	1 000 1 000	1 250 1 000	1 500 1 000	1 750 1 000	2 000 1 000	2 250 1 000

Indicative Dimensions Table

Dimensions are in mm.

GTO.25a		Number of Modules Horizontally / Pixels				
		2 256	3 384	4 512	5 640	6 768
No. of Modules Vertically / Pixels	1 64	640 160	960 160	1 280 160	1 600 160	1 920 160
	2 128	640 320	960 320	1 280 320	1 600 320	1 920 320
	3 192	640 480	960 480	1 280 480	1 600 480	1 920 480
	4 256	640 640	960 640	1 280 640	1 600 640	1 920 640
	5 320	640 800	960 800	1 280 800	1 600 800	1 920 800
	6 384	640 960	960 960	1 280 960	1 600 960	1 920 960

Dimensions are in mm.

GTO.39		Number of Modules Horizontally / Pixels							
		2 128	3 192	4 256	5 320	6 384	7 448	8 512	9 576
No. of Modules Vertically / Pixels	1 64	500 250	750 250	1 000 250	1 250 250	1 500 250	1 750 250	2 000 250	2 250 250
	2 128	500 500	750 500	1 000 500	1 250 500	1 500 500	1 750 500	2 000 500	2 250 500
	3 192	500 750	750 750	1 000 750	1 250 750	1 500 750	1 750 750	2 000 750	2 250 750
	4 256	500 1 000	750 1 000	1 000 1 000	1 250 1 000	1 500 1 000	1 750 1 000	2 000 1 000	2 250 1 000

Order Reference

1	Model	
	GTO.18s	18s
	GTO.25	25
	GTO.25a	25a
	GTO.39	39

2	Number of Pixels Horizontally	
	GTO.18s (135 px per module)	270–1215
	GTO.25 (100 px per module)	200–900
	GTO.25a (128 px per module)	256–768
	GTO.39 (64 px per module)	128–576

3	Number of Pixels Vertically	
	GTO.18s (135 px per module)	135–540
	GTO.25 (100 px per module)	100–400
	GTO.25a (64 px per module)	64–384
	GTO.39 (64 px per module)	64–256

4	Display Color	
	Full color RGB display	RGB

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	
	Anti-reflective single layer tempered glass (ESG)	A
	Anti-reflective double layer laminated safety glass (LSG)	L

8	Options ¹	
	(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 LTE with short-term power backup	LTB
	Interface fiber optics	FO
	Preparation for interface fiber optics	FOP
	Variant without supply terminal block for combination with standard panel on common clock part	SLAVE
	Tamper switch	ST
	Remote device restart trigger option	RR
	Power outage notification	PFN
	Auxiliary security lock	ASL

¹ Some options cannot be combined with each other due to technical reasons. Please contact manufacturer to verify the configuration.

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

Order example:

GTO.25.600.200.RGB.N.N.A.CLK.TTS.RS485.RAL5003

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

Order Reference of Clock Part

1

Model

Analogue clock	ACLK
Analogue clock with seconds hand	ACLKS

2

Dial Diameter

250 mm	250
500 mm	500

3

Dial Type

Standard design	C11
Custom design on request	CSP

4

Design

Single sided	N
Double sided	D

5

Mounting

Assembly T	T
Assembly L	L
Assembly L with fastening on left side of clock part	LL
Assembly L with fastening on right side of clock part	LR
Ceiling suspension with additional fastening on side	SB
Ceiling suspension with additional fastening on left side	SL
Ceiling suspension with additional fastening on right side	SR
Wall bracket	B
Side mounting between display and frame	BB
Side mounting with fastening on left side	BL
Side mounting with fastening on right side	BR
Customized solution on request	Z

6

Cover Glass

Anti-reflective single layer tempered glass (ESG)	A
Anti-reflective double layer laminated safety glass (LSG)	L

7

Synchronization

NTP synchronization via LAN	LAN
Synchronization via RS-485	RS485

8

Frame Color

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

Order example:

GTO.ACLKS.500.C11.D.T.A.RS485.RAL5003

GTO	1	2	3	4	5	6	7	8
	Model	Dial Diameter	dial type	Design	Mounting	Cover Glass	Synchronization	Frame Color

Accessories

Holders:

- 1

Holder

Wall holder	WH.F
-------------	------
- 2

Model

GT0.18s	GT0.18s
GT0.25	GT0.25
GT0.25a	GT0.25a
GT0.39	GT0.39
- 3

Number of Pixels Horizontally

GT0.18s (135 px per module)	270–1215
GT0.25 (100 px per module)	200–900
GT0.25a (128 px per module)	256–896
GT0.39 (64 px per module)	128–576
- 4

Number of Pixels Vertically

GT0.18s (135 px per module)	135–540
GT0.25 (100 px per module)	100–400
GT0.25a (64 px per module)	64–384
GT0.39 (64 px per module)	64–256

- 5

Options

Fixed header (number indicates specific design	Px
Digital clock	CLK
Analogue clock	ACLK
Analogue clock with seconds hand	ACLKS
Platform number	Nb
- 6

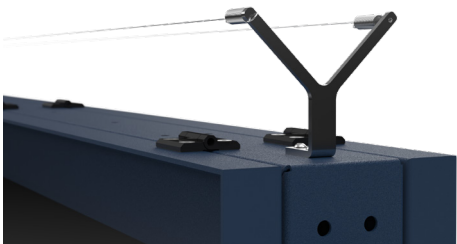
Frame Color

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

Other:

Accessories

Protection against birdsGT0.BP



Order example
for display GT0.25.600.200.RGB.N.N.A.CLK.TTS.RS485.RAL5003:

WH.F.GT0.25.600.200.CLK.RAL5003

1

Holder

2

Model

3

Number of Pixels Horizontally

4

Number of Pixels Vertically

5

Options

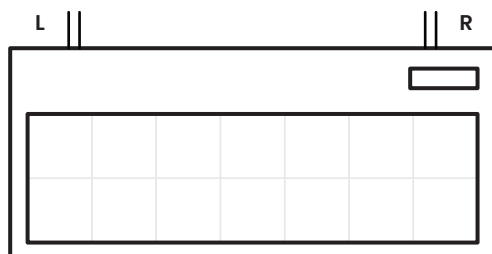
6

Frame Color

Mounting

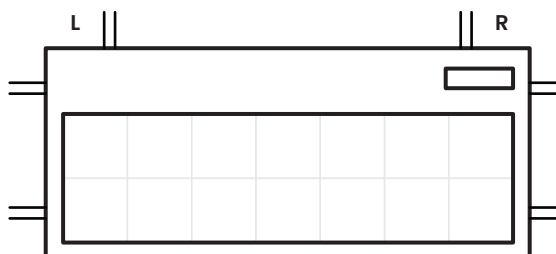
Display Part

Ceiling suspension



Order reference: **S**

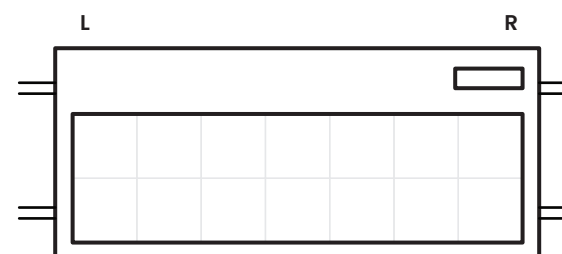
Ceiling Suspension with Additional Fastening on Side of the Display



Order reference for single sided: **SL / SR**

Order reference for double sided: **SB**

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

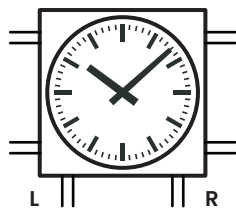


Order reference for single sided: **BL / BR**

Order reference for double sided: **B**

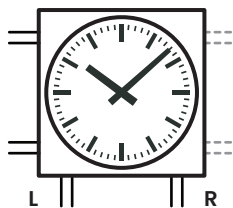
Clock Part

Assembly T



Order reference: **T**

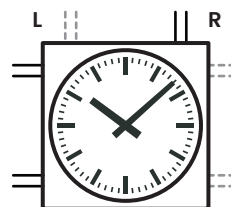
Assembly L



Order reference for single sided:
LL / LR

Order reference for double sided:
L

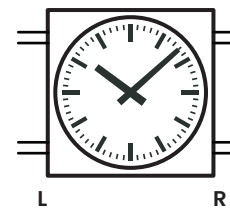
Ceiling Suspension



Order reference for single sided:
SL / SR

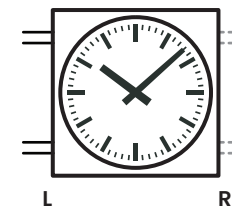
Order reference for double sided:
SB

Side Mounting Between Display and Frame



Order reference: **BB**

Wall Bracket



Order reference for single sided:
BL / BR

Order reference for double sided:
B

Get in Touch

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LE-801330.12-GTO Outdoor LED Full Matrix Information Display-260921

Your Partner Across Time...

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.

