

Graphical Displays

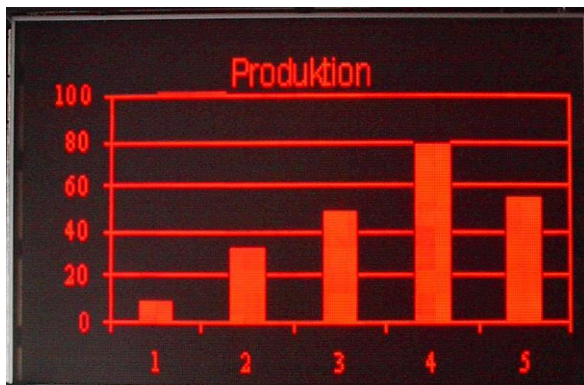
Series MM

Halle 1 24.09.2001

	soll	ist
Linie A	5000	3456
Linie B	10000	7001
Linie C	200	199

Ankunft

Flug	aus	planmäßig	Bemerkung
LH 4321	London	14:22	gelandet
BA 5289	New York	14:30	gelandet
AF 9556	Paris	14:38	
LH 7689	Mosk au	14:49	
TF 1357	Tokio	15:00	
LH 0134	Kairo	15:07	



7S SHAFT

Stopzeit: 0 Schicht-Soll: 0
Nachzeit: 0 IST: 0

11:12 Teamleader - 1040

1090	1040 - OL	1081 - CL
1110 - QA	1130 - FL	1140 - FL

- ⇒ display area is variable
- ⇒ single- and double-sided construction
- ⇒ display field is freely programmable by user software

GENERAL

Our graphical displays of the series MM are used everywhere, where information must be visualized graphically in a large format. They are always actual and dependent on certain parameters. Furthermore these displays can also be used for promotion purposes or for animation. For example it is possible to run data on the display from any usual presentation software.

The displays are suitable for indoor usage as well as shadowed outdoor usage.

They are controlled via network interface (Ethernet TCP/IP).

APPLICATION FIELDS

The graphical displays of the series MM can be used for example in the following applications:

- Andon-board
- display of machine status in assembly lines
- production
- departure display for ships, buses, railways, airplanes
- display of sports results
- advertising
- in operas to display simultaneous translations
- display of car status in fire stations
- co-worker information and motivation
- visitor information
- message displays of system data

TECHNIQUE

The graphical displays of the series MM only exist in LED technique. For a close range we use modules with an LED diameter of 3 mm (MM3), and if reading distances of more than 15 m are concerned modules with an LED diameter of 5 mm (MM5) are used.

By doing so the displays can be equipped with single- or two-coloured LED's.

LED`s with a diameter of 5 mm (series MM5)

- pixel spacing 7,62 mm
- module size 32 x 32 pixels = 244 x 244 mm
- colour of LEDs: single-coloured red, yellow or green
 two-coloured red and green
- max. number of generatable colours: 256
- single- or double-sided
- integrated PC
- audio output is possible (any melodies)
- individual display masks with freely definable fields like date, time, text, numbers
- interface: network (ethernet TCP/IP 10/100 MBit, HTML-capable)
- for indoor and outdoor usage (no sunshine into the display)
- variable display size in height and width in 32 pixel steps
- power consumption: per module 32x32 pixels: approx. 50 W
- mains supply: 230 VAC or 400 VAC (depending on the display size)
- housing: double section aluminium profile in silver anodized or powder coated in RAL 5007, on request in any RAL colour
- maintenance-free construction

LED`s with a diameter of 3 mm (serie MM3)

- pixel spacing 4,0 mm
- module size 64 x 32 pixels = 256 x 128 mm
- colour of LEDs: single-coloured red, yellow or green
 two-coloured red and green
- max. number of generatable colours: 256
- single- or double-sided
- integrated PC
- audio output is possible (any melodies)
- individual display masks with freely definable fields like date, time, text, numbers
- interface: network (ethernet TCP/IP 10/100 MBit, HTML-capable)
- for indoor and outdoor usage (no sunshine into the display)
- variable display size in horizontal direction in 64 pixel steps
- variable display size in vertical direction in 32 pixel steps
- power consumption: per module 64x32 pixel: approx. 50 W
- mains supply: 230 VAC or 400 VAC (depending on the display size)
- housing: double section aluminium profile in silver anodized or powder coated in RAL 5007, on request in any RAL colour
- maintenance-free construction

INTERFACES

Ethernet: TCP/IP-protocol

It is possible to process HTML-files. By doing so the display can be completely flexible and is used as an executive device.

On the harddisk of the PC EXE-files can be installed to run user-specific software including data.

Machine signals can be read in and processed. For this purpose however special electronics are necessary.

With the help of customer-specific software any display masks can be generated. Also, it is possible to output special messages or event-controlled labels on the display.

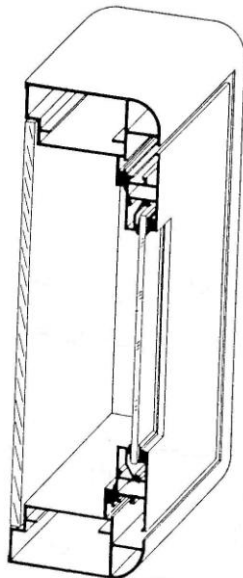
If any configurations of the machine inputs are necessary you can make them via a special software.

THE HOUSINGS

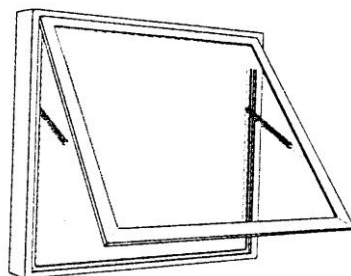
Housing of the Series D200

construction:	1- or 2-sided
application field:	indoor and outdoor weatherproof and especially suitable for outdoor purposes As the housing has a forced ventilation, under normal conditions there is no condensation inside the housing.
depth	200 mm
housing material:	double section aluminium profile
housing colour:	standard: silver anodized, option: all RAL-colours deliverable
open the housing:	from the front: Please unlock the front door and turn it up. The front door will be kept open by gas-pressurized springs.

Layout of the housing:



Open the housing by gas-pressurized springs:



The standard displays of the series MM3 (1/2)

designation	Colour of LED	resolution (W x H)	sides	LED-area (WxH) in [mm]	dimension (WxH) in [mm]
MM3-128x64-R-S	red	128 x 64	1-sided	512 x 256	810 x 560
MM3-128x64-G-S	green	128 x 64	1-sided	512 x 256	810 x 560
MM3-128x64-RG-S	r/g/y	128 x 64	1-sided	512 x 256	810 x 560
MM3-128x96-R-S	red	128 x 96	1-sided	512 x 384	810 x 700
MM3-128x96-G-S	green	128 x 96	1-sided	512 x 384	810 x 700
MM3-128x96-RG-S	r/g/y	128 x 96	1-sided	512 x 384	810 x 700
MM3-128x128-R-S	red	128 x 128	1-sided	512 x 512	810 x 810
MM3-128x128-G-S	green	128 x 128	1-sided	512 x 512	810 x 810
MM3-128x128-RG-S	r/g/y	128 x 128	1-sided	512 x 512	810 x 810
MM3-192x64-R-S	red	192 x 64	1-sided	768 x 256	1.070 x 560
MM3-192x64-G-S	green	192 x 64	1-sided	768 x 256	1.070 x 560
MM3-192x64-RG-S	r/g/y	192 x 64	1-sided	768 x 256	1.070 x 560
MM3-192x96-R-S	red	192 x 96	1-sided	768 x 384	1.070 x 700
MM3-192x96-G-S	green	192 x 96	1-sided	768 x 384	1.070 x 700
MM3-192x96-RG-S	r/g/y	192 x 96	1-sided	768 x 384	1.070 x 700
MM3-192x128-R-S	red	192 x 128	1-sided	768 x 512	1.070 x 810
MM3-192x128-G-S	green	192 x 128	1-sided	768 x 512	1.070 x 810
MM3-192x128-RG-S	r/g/y	192 x 128	1-sided	768 x 512	1.070 x 810
MM3-192x160-R-S	red	192 x 160	1-sided	768 x 640	1.070 x 940
MM3-192x160-G-S	green	192 x 160	1-sided	768 x 640	1.070 x 940
MM3-192x160-RG-S	r/g/y	192 x 160	1-sided	768 x 640	1.070 x 940
MM3-256x64-R-S	red	256 x 64	1-sided	1.024 x 256	1.330 x 560
MM3-256x64-G-S	green	256 x 64	1-sided	1.024 x 256	1.330 x 560
MM3-256x64-RG-S	r/g/y	256 x 64	1-sided	1.024 x 256	1.330 x 560
MM3-256x96-R-S	red	256 x 96	1-sided	1.024 x 384	1.330 x 700
MM3-256x96-G-S	green	256 x 96	1-sided	1.024 x 384	1.330 x 700
MM3-256x96-RG-S	r/g/y	256 x 96	1-sided	1.024 x 384	1.330 x 700
MM3-256x128-R-S	red	256 x 128	1-sided	1.024 x 512	1.330 x 810
MM3-256x128-G-S	green	256 x 128	1-sided	1.024 x 512	1.330 x 810
MM3-256x128-RG-S	r/g/y	256 x 128	1-sided	1.024 x 512	1.330 x 810
MM3-256x160-R-S	red	256 x 160	1-sided	1.024 x 640	1.330 x 940
MM3-256x160-G-S	green	256 x 160	1-sided	1.024 x 640	1.330 x 940
MM3-256x160-RG-S	r/g/y	256 x 160	1-sided	1.024 x 640	1.330 x 940
MM3-320x64-R-S	red	320 x 64	1-sided	1.280 x 256	1.580 x 560
MM3-320x64-G-S	green	320 x 64	1-sided	1.280 x 256	1.580 x 560
MM3-320x64-RG-S	r/g/y	320 x 64	1-sided	1.280 x 256	1.580 x 560
MM3-320x96-R-S	red	320 x 96	1-sided	1.280 x 384	1.580 x 700
MM3-320x96-G-S	green	320 x 96	1-sided	1.280 x 384	1.580 x 700
MM3-320x96-RG-S	r/g/y	320 x 96	1-sided	1.280 x 384	1.580 x 700

The standard displays of the series MM3 (2/2)

designation	Colour of LED	resolution (W x H)	sides	LED-area (WxH) in [mm]	dimension (WxH) in [mm]
MM3-320x128-R-S	red	320 x 128	1- sided	1.280 x 512	1.580 x 810
MM3-320x128-G-S	green	320 x 128	1- sided	1.280 x 512	1.580 x 810
MM3-320x128-RG-S	r/g/y	320 x 128	1- sided	1.280 x 512	1.580 x 810
MM3-320x160-R-S	red	320 x 160	1- sided	1.280 x 160	1.580 x 940
MM3-320x160-G-S	green	320 x 160	1- sided	1.280 x 160	1.580 x 940
MM3-320x160-RG-S	r/g/y	320 x 160	1- sided	1.280 x 160	1.580 x 940

The standard displays of the series MM5 (1/4)

designation	Colour of LED	resolution (W x H)	sides	LED-area (WxH) in [mm]	dimension (WxH) in [mm]
MM5-128x64-R-S	red	128 x 64	1- sided	975 x 487	1.270 x 800
MM5-128x64-G-S	green	128 x 64	1- sided	975 x 487	1.270 x 800
MM5-128x64-RG-S	r/g/y	128 x 64	1- sided	975 x 487	1.270 x 800
MM5-128x64-R-D	red	128 x 64	2- sided	975 x 487	1.270 x 800
MM5-128x64-G-D	green	128 x 64	2- sided	975 x 487	1.270 x 800
MM5-128x64-RG-D	r/g/y	128 x 64	2- sided	975 x 487	1.270 x 800
MM5-128x96-R-S	red	128 x 96	1- sided	975 x 731	1.270 x 1.050
MM5-128x96-G-S	green	128 x 96	1- sided	975 x 731	1.270 x 1.050
MM5-128x96-RG-S	r/g/y	128 x 96	1- sided	975 x 731	1.270 x 1.050
MM5-128x96-R-D	red	128 x 96	2- sided	975 x 731	1.270 x 1.050
MM5-128x96-G-D	green	128 x 96	2- sided	975 x 731	1.270 x 1.050
MM5-128x96-RG-D	r/g/y	128 x 96	2- sided	975 x 731	1.270 x 1.050
MM5-128x128-R-S	red	128 x 128	1- sided	975 x 975	1.270 x 1.270
MM5-128x128-G-S	green	128 x 128	1- sided	975 x 975	1.270 x 1.270
MM5-128x128-RG-S	r/g/y	128 x 128	1- sided	975 x 975	1.270 x 1.270
MM5-128x128-R-D	red	128 x 128	2- sided	975 x 975	1.270 x 1.270
MM5-128x128-G-D	green	128 x 128	2- sided	975 x 975	1.270 x 1.270
MM5-128x128-RG-D	r/g/y	128 x 128	2- sided	975 x 975	1.270 x 1.270
MM5-160x64-R-S	red	160 x 64	1- sided	1.219 x 487	1.520 x 800
MM5-160x64-G-S	green	160 x 64	1- sided	1.219 x 487	1.520 x 800
MM5-160x64-RG-S	r/g/y	160 x 64	1- sided	1.219 x 487	1.520 x 800
MM5-160x64-R-D	red	160 x 64	2- sided	1.219 x 487	1.520 x 800
MM5-160x64-G-D	green	160 x 64	2- sided	1.219 x 487	1.520 x 800
MM5-160x64-RG-D	r/g/y	160 x 64	2- sided	1.219 x 487	1.520 x 800
MM5-160x96-R-S	red	160 x 96	1- sided	1.219 x 731	1.520 x 1.050
MM5-160x96-G-S	green	160 x 96	1- sided	1.219 x 731	1.520 x 1.050
MM5-160x96-RG-S	r/g/y	160 x 96	1- sided	1.219 x 731	1.520 x 1.050
MM5-160x96-R-D	red	160 x 96	2- sided	1.219 x 731	1.520 x 1.050
MM5-160x96-G-D	green	160 x 96	2- sided	1.219 x 731	1.520 x 1.050
MM5-160x96-RG-D	r/g/y	160 x 96	2- sided	1.219 x 731	1.520 x 1.050
MM5-160x128-R-S	red	160 x 128	1- sided	1.219 x 975	1.520 x 1.270
MM5-160x128-G-S	green	160 x 128	1- sided	1.219 x 975	1.520 x 1.270
MM5-160x128-RG-S	r/g/y	160 x 128	1- sided	1.219 x 975	1.520 x 1.270
MM5-160x128-R-D	red	160 x 128	2- sided	1.219 x 975	1.520 x 1.270
MM5-160x128-G-D	green	160 x 128	2- sided	1.219 x 975	1.520 x 1.270
MM5-160x128-RG-D	r/g/y	160 x 128	2- sided	1.219 x 975	1.520 x 1.270
MM5-160x160-R-S	red	160 x 160	1- sided	1.219 x 1.219	1.520 x 1.520
MM5-160x160-G-S	green	160 x 160	1- sided	1.219 x 1.219	1.520 x 1.520
MM5-160x160-RG-S	r/g/y	160 x 160	1- sided	1.219 x 1.219	1.520 x 1.520
MM5-160x160-R-D	red	160 x 160	2- sided	1.219 x 1.219	1.520 x 1.520
MM5-160x160-G-D	green	160 x 160	2- sided	1.219 x 1.219	1.520 x 1.520
MM5-160x160-RG-D	r/g/y	160 x 160	2- sided	1.219 x 1.219	1.520 x 1.520

The standard displays of the series MM5 (2/4)

designation	Colour of LED	resolution (W x H)	sides	LED-area (WxH) in [mm]	dimension (WxH) in [mm]
MM5-192x64-R-S	red	192 x 64	1- sided	1.463 x 487	1.770 x 800
MM5-192x64-G-S	green	192 x 64	1- sided	1.463 x 487	1.770 x 800
MM5-192x64-RG-S	r/g/y	192 x 64	1- sided	1.463 x 487	1.770 x 800
MM5-192x64-R-D	red	192 x 64	2- sided	1.463 x 487	1.770 x 800
MM5-192x64-G-D	green	192 x 64	2- sided	1.463 x 487	1.770 x 800
MM5-192x64-RG-D	r/g/y	192 x 64	2- sided	1.463 x 487	1.770 x 800
MM5-192x96-R-S	red	192 x 96	1- sided	1.463 x 731	1.770 x 1.050
MM5-192x96-G-S	green	192 x 96	1- sided	1.463 x 731	1.770 x 1.050
MM5-192x96-RG-S	r/g/y	192 x 96	1- sided	1.463 x 731	1.770 x 1.050
MM5-192x96-R-D	red	192 x 96	2- sided	1.463 x 731	1.770 x 1.050
MM5-192x96-G-D	green	192 x 96	2- sided	1.463 x 731	1.770 x 1.050
MM5-192x96-RG-D	r/g/y	192 x 96	2- sided	1.463 x 731	1.770 x 1.050
MM5-192x128-R-S	red	192 x 128	1- sided	1.463 x 975	1.770 x 1.270
MM5-192x128-G-S	green	192 x 128	1- sided	1.463 x 975	1.770 x 1.270
MM5-192x128-RG-S	r/g/y	192 x 128	1- sided	1.463 x 975	1.770 x 1.270
MM5-192x128-R-D	red	192 x 128	2- sided	1.463 x 975	1.770 x 1.270
MM5-192x128-G-D	green	192 x 128	2- sided	1.463 x 975	1.770 x 1.270
MM5-192x128-RG-D	r/g/y	192 x 128	2- sided	1.463 x 975	1.770 x 1.270
MM5-192x160-R-S	red	192 x 160	1- sided	1.463 x 1.219	1.770 x 1.520
MM5-192x160-G-S	green	192 x 160	1- sided	1.463 x 1.219	1.770 x 1.520
MM5-192x160-RG-S	r/g/y	192 x 160	1- sided	1.463 x 1.219	1.770 x 1.520
MM5-192x160-R-D	red	192 x 160	2- sided	1.463 x 1.219	1.770 x 1.520
MM5-192x160-G-D	green	192 x 160	2- sided	1.463 x 1.219	1.770 x 1.520
MM5-192x160-RG-D	r/g/y	192 x 160	2- sided	1.463 x 1.219	1.770 x 1.520
MM5-224x64-R-S	red	224 x 64	1- sided	1.707 x 487	2.000 x 800
MM5-224x64-G-S	green	224 x 64	1- sided	1.707 x 487	2.000 x 800
MM5-224x64-RG-S	r/g/y	224 x 64	1- sided	1.707 x 487	2.000 x 800
MM5-224x64-R-D	red	224 x 64	2- sided	1.707 x 487	2.000 x 800
MM5-224x64-G-D	green	224 x 64	2- sided	1.707 x 487	2.000 x 800
MM5-224x64-RG-D	r/g/y	224 x 64	2- sided	1.707 x 487	2.000 x 800
MM5-224x96-R-S	red	224 x 96	1- sided	1.707 x 731	2.000 x 1.050
MM5-224x96-G-S	green	224 x 96	1- sided	1.707 x 731	2.000 x 1.050
MM5-224x96-RG-S	r/g/y	224 x 96	1- sided	1.707 x 731	2.000 x 1.050
MM5-224x96-R-D	red	224 x 96	2- sided	1.707 x 731	2.000 x 1.050
MM5-224x96-G-D	green	224 x 96	2- sided	1.707 x 731	2.000 x 1.050
MM5-224x96-RG-D	r/g/y	224 x 96	2- sided	1.707 x 731	2.000 x 1.050
MM5-224x128-R-S	red	224 x 128	1- sided	1.707 x 975	2.000 x 1.270
MM5-224x128-G-S	green	224 x 128	1- sided	1.707 x 975	2.000 x 1.270
MM5-224x128-RG-S	r/g/y	224 x 128	1- sided	1.707 x 975	2.000 x 1.270
MM5-224x128-R-D	red	224 x 128	2- sided	1.707 x 975	2.000 x 1.270
MM5-224x128-G-D	green	224 x 128	2- sided	1.707 x 975	2.000 x 1.270
MM5-224x128-RG-D	r/g/y	224 x 128	2- sided	1.707 x 975	2.000 x 1.270
MM5-224x160-R-S	red	224 x 160	1- sided	1.707 x 1.219	2.000 x 1.520
MM5-224x160-G-S	green	224 x 160	1- sided	1.707 x 1.219	2.000 x 1.520
MM5-224x160-RG-S	r/g/y	224 x 160	1- sided	1.707 x 1.219	2.000 x 1.520
MM5-224x160-R-D	red	224 x 160	2- sided	1.707 x 1.219	2.000 x 1.520
MM5-224x160-G-D	green	224 x 160	2- sided	1.707 x 1.219	2.000 x 1.520
MM5-224x160-RG-D	r/g/y	224 x 160	2- sided	1.707 x 1.219	2.000 x 1.520

The standard displays of the series MM5 (3/4)

designation	Colour of LED	resolution (W x H)	sides	LED-area (WxH) in [mm]	dimension (WxH) in [mm]
MM5-224x160-R-S	red	224 x 160	1- sided	1.707 x 1.219	2.000 x 1.520
MM5-224x160-G-S	green	224 x 160	1- sided	1.707 x 1.219	2.000 x 1.520
MM5-224x160-RG-S	r/g/y	224 x 160	1- sided	1.707 x 1.219	2.000 x 1.520
MM5-224x160-R-D	red	224 x 160	2- sided	1.707 x 1.219	2.000 x 1.520
MM5-224x160-G-D	green	224 x 160	2- sided	1.707 x 1.219	2.000 x 1.520
MM5-224x160-RG-D	r/g/y	224 x 160	2- sided	1.707 x 1.219	2.000 x 1.520
MM5-256x64-R-S	red	256 x 64	1- sided	1.950 x 487	2.250 x 800
MM5-256x64-G-S	green	256 x 64	1- sided	1.950 x 487	2.250 x 800
MM5-256x64-RG-S	r/g/y	256 x 64	1- sided	1.950 x 487	2.250 x 800
MM5-256x64-R-D	red	256 x 64	2- sided	1.950 x 487	2.250 x 800
MM5-256x64-G-D	green	256 x 64	2- sided	1.950 x 487	2.250 x 800
MM5-256x64-RG-D	r/g/y	256 x 64	2- sided	1.950 x 487	2.250 x 800
MM5-256x96-R-S	red	256 x 96	1- sided	1.950 x 731	2.250 x 1.050
MM5-256x96-G-S	green	256 x 96	1- sided	1.950 x 731	2.250 x 1.050
MM5-256x96-RG-S	r/g/y	256 x 96	1- sided	1.950 x 731	2.250 x 1.050
MM5-256x96-R-D	red	256 x 96	2- sided	1.950 x 731	2.250 x 1.050
MM5-256x96-G-D	green	256 x 96	2- sided	1.950 x 731	2.250 x 1.050
MM5-256x96-RG-D	r/g/y	256 x 96	2- sided	1.950 x 731	2.250 x 1.050
MM5-256x128-R-S	red	256 x 128	1- sided	1.950 x 975	2.250 x 1.270
MM5-256x128-G-S	green	256 x 128	1- sided	1.950 x 975	2.250 x 1.270
MM5-256x128-RG-S	r/g/y	256 x 128	1- sided	1.950 x 975	2.250 x 1.270
MM5-256x128-R-D	red	256 x 128	2- sided	1.950 x 975	2.250 x 1.270
MM5-256x128-G-D	green	256 x 128	2- sided	1.950 x 975	2.250 x 1.270
MM5-256x128-RG-D	r/g/y	256 x 128	2- sided	1.950 x 975	2.250 x 1.270
MM5-256x160-R-S	red	256 x 160	1- sided	1.950 x 1.219	2.250 x 1.520
MM5-256x160-G-S	green	256 x 160	1- sided	1.950 x 1.219	2.250 x 1.520
MM5-256x160-RG-S	r/g/y	256 x 160	1- sided	1.950 x 1.219	2.250 x 1.520
MM5-256x160-R-D	red	256 x 160	2- sided	1.950 x 1.219	2.250 x 1.520
MM5-256x160-G-D	green	256 x 160	2- sided	1.950 x 1.219	2.250 x 1.520
MM5-256x160-RG-D	r/g/y	256 x 160	2- sided	1.950 x 1.219	2.250 x 1.520
MM5-288x64-R-S	red	288 x 64	1- sided	2.195 x 487	2.500 x 800
MM5-288x64-G-S	green	288 x 64	1- sided	2.195 x 487	2.500 x 800
MM5-288x64-RG-S	r/g/y	288 x 64	1- sided	2.195 x 487	2.500 x 800
MM5-288x64-R-D	red	288 x 64	2- sided	2.195 x 487	2.500 x 800
MM5-288x64-G-D	green	288 x 64	2- sided	2.195 x 487	2.500 x 800
MM5-288x64-RG-D	r/g/y	288 x 64	2- sided	2.195 x 487	2.500 x 800
MM5-288x96-R-S	red	288 x 96	1- sided	2.195 x 731	2.500 x 1.050
MM5-288x96-G-S	green	288 x 96	1- sided	2.195 x 731	2.500 x 1.050
MM5-288x96-RG-S	r/g/y	288 x 96	1- sided	2.195 x 731	2.500 x 1.050
MM5-288x96-R-D	red	288 x 96	2- sided	2.195 x 731	2.500 x 1.050
MM5-288x96-G-D	green	288 x 96	2- sided	2.195 x 731	2.500 x 1.050
MM5-288x96-RG-D	r/g/y	288 x 96	2- sided	2.195 x 731	2.500 x 1.050
MM5-288x128-R-S	red	288 x 128	1- sided	2.195 x 975	2.500 x 1.270
MM5-288x128-G-S	green	288 x 128	1- sided	2.195 x 975	2.500 x 1.270
MM5-288x128-RG-S	r/g/y	288 x 128	1- sided	2.195 x 975	2.500 x 1.270
MM5-288x128-R-D	red	288 x 128	2- sided	2.195 x 975	2.500 x 1.270
MM5-288x128-G-D	green	288 x 128	2- sided	2.195 x 975	2.500 x 1.270
MM5-288x128-RG-D	r/g/y	288 x 128	2- sided	2.195 x 975	2.500 x 1.270

The standard displays of the series MM5 (4/4)

designation	Colour of LED	resolution (W x H)	sides	LED-area (WxH) in [mm]	dimension (WxH) in [mm]
MM5-288x160-R-S	red	288 x 160	1- sided	2.195 x 1.219	2.500 x 1.520
MM5-288x160-G-S	green	288 x 160	1- sided	2.195 x 1.219	2.500 x 1.520
MM5-288x160-RG-S	r/g/y	288 x 160	1- sided	2.195 x 1.219	2.500 x 1.520
MM5-288x160-R-D	red	288 x 160	2- sided	2.195 x 1.219	2.500 x 1.520
MM5-288x160-G-D	green	288 x 160	2- sided	2.195 x 1.219	2.500 x 1.520
MM5-288x160-RG-D	r/g/y	288 x 160	2- sided	2.195 x 1.219	2.500 x 1.520
MM5-320x64-R-S	red	320 x 64	1- sided	2.438 x 487	2.750 x 800
MM5-320x64-G-S	green	320 x 64	1- sided	2.438 x 487	2.750 x 800
MM5-320x64-RG-S	r/g/y	320 x 64	1- sided	2.438 x 487	2.750 x 800
MM5-320x64-R-D	red	320 x 64	2- sided	2.438 x 487	2.750 x 800
MM5-320x64-G-D	green	320 x 64	2- sided	2.438 x 487	2.750 x 800
MM5-320x64-RG-D	r/g/y	320 x 64	2- sided	2.438 x 487	2.750 x 800
MM5-320x96-R-S	red	320 x 96	1- sided	2.438 x 731	2.750 x 1.050
MM5-320x96-G-S	green	320 x 96	1- sided	2.438 x 731	2.750 x 1.050
MM5-320x96-RG-S	r/g/y	320 x 96	1- sided	2.438 x 731	2.750 x 1.050
MM5-320x96-R-D	red	320 x 96	2- sided	2.438 x 731	2.750 x 1.050
MM5-320x96-G-D	green	320 x 96	2- sided	2.438 x 731	2.750 x 1.050
MM5-320x96-RG-D	r/g/y	320 x 96	2- sided	2.438 x 731	2.750 x 1.050
MM5-320x128-R-S	red	320 x 128	1- sided	2.438 x 975	2.750 x 1.270
MM5-320x128-G-S	green	320 x 128	1- sided	2.438 x 975	2.750 x 1.270
MM5-320x128-RG-S	r/g/y	320 x 128	1- sided	2.438 x 975	2.750 x 1.270
MM5-320x128-R-D	red	320 x 128	2- sided	2.438 x 975	2.750 x 1.270
MM5-320x128-G-D	green	320 x 128	2- sided	2.438 x 975	2.750 x 1.270
MM5-320x128-RG-D	r/g/y	320 x 128	2- sided	2.438 x 975	2.750 x 1.270
MM5-320x160-R-S	red	320 x 160	1- sided	2.438 x 1.219	2.750 x 1.520
MM5-320x160-G-S	green	320 x 160	1- sided	2.438 x 1.219	2.750 x 1.520
MM5-320x160-RG-S	r/g/y	320 x 160	1- sided	2.438 x 1.219	2.750 x 1.520
MM5-320x160-R-D	red	320 x 160	2- sided	2.438 x 1.219	2.750 x 1.520
MM5-320x160-G-D	green	320 x 160	2- sided	2.438 x 1.219	2.750 x 1.520
MM5-320x160-RG-D	r/g/y	320 x 160	2- sided	2.438 x 1.219	2.750 x 1.520

Other sizes on request.