

METROSPEC

PASSENGER INFORMATION DISPLAYS

Home of display technologies <<<<<<<<<

METROSPEC

METROSPEC

METROSPEC

METROSPEC

METROSPEC

METROSPEC



METROMATICS

Metromatics is a manufacturer of Passenger Information Displays, Indoor/ Outdoor LCD Displays, On Board Passenger Information Systems, Public Information Displays and other LCD Based Display Technology branded under our trademark name MetroSpec.

Established in 1989, we have over 20 years' experience in providing our customers with leading edge solutions and we are a leader in our industry for design, research & development, manufacture, management, integration of our quality indoor & outdoor display products.

QUALITY

We are ISO 9001:2008 accredited with our Head Office located in Brisbane, Australia and we are seeking dedicated representatives from around the world.

THE WAY WE PROJECT MANAGE PRECISELY, PERFECTLY TO ACHIEVE THE END PRODUCT



VISION STATEMENT

Our Vision is to be successful, innovative and a solutions provider to our customers.

MISSION STATEMENT

Our focus is to establish & maintain a working relationship with our customers, with a continuous goal to deliver quality products from ourselves and to provide our customers with the ultimate solution.

RESEARCH & DEVELOPMENT

We recognise the importance of Research & Development and specialise in the customisation of our products.

We have a team of project managers, systems integrators, engineering and production staff dedicated to this area constantly striving to produce world first leading edge technology to meet our customers' requirements.

DESIGN & PROJECT MANAGEMENT CAPABILITIES

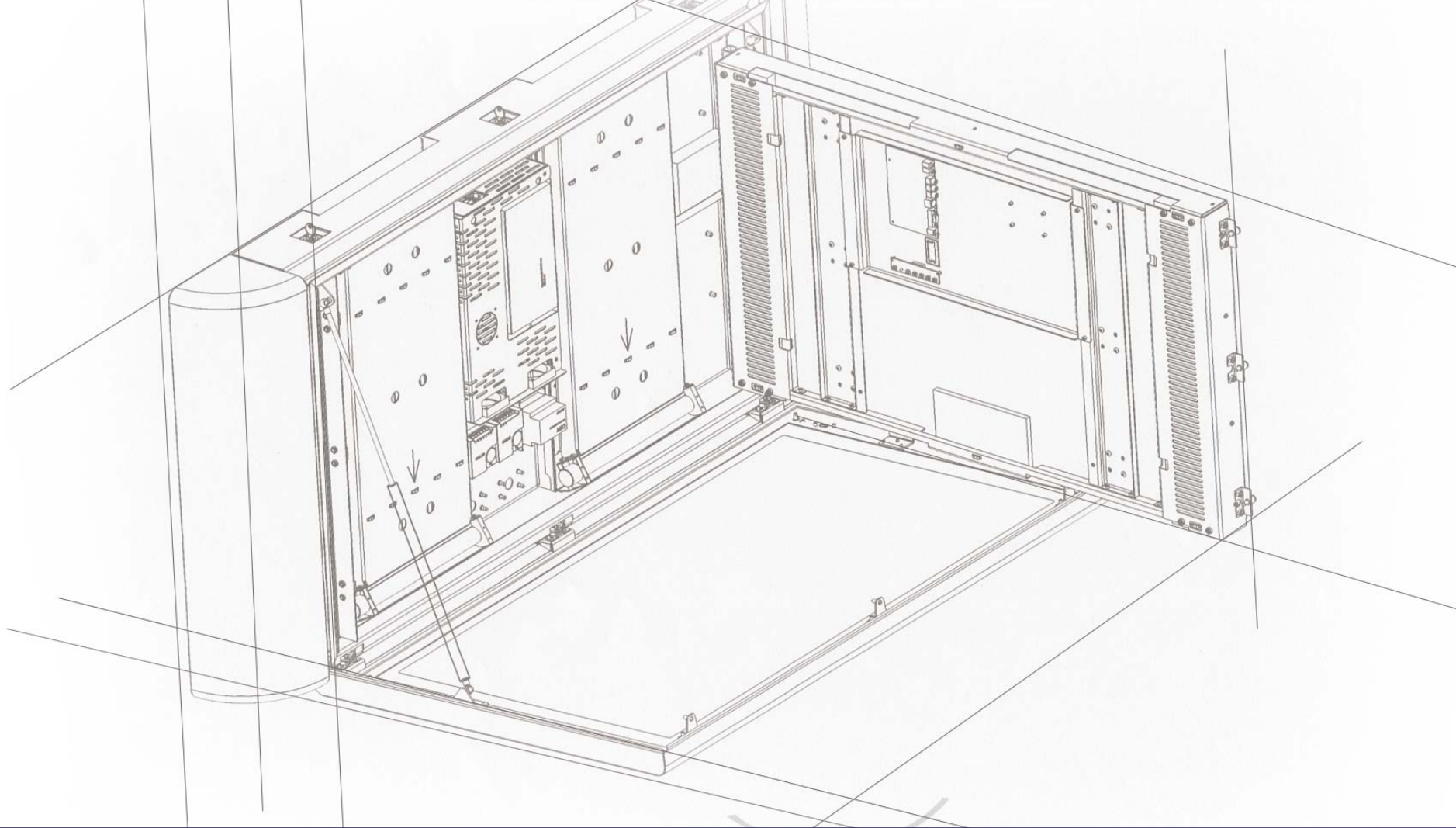
We have full time Mechanical & Electrical Design Engineers, who are experienced in working with our customers to incorporate their requirements into a design.

Using the latest Research & Development (CAD/CAM) Software packages, we progress through to the build of prototypes before full production is enforced.

Our Project Managers, ensure that the projects runs smoothly, by determining the project milestones and identifying what tasks need to be completed in order for the project to be completed in a timely manner by regular communication with our customers and engineering and production departments.

Our Systems Engineers are experienced in systems integration from product concept to final product roll out.

Our service track record is impeccable our products are built to last with over 2000+ of our LCD display products in the Australasian Market working in the harsh conditions the return rate is less than 0.05% - which is impressive.



Our systems >>>>





PASSENGER INFORMATION DISPLAYS

MetroSpec Passenger Information Displays are used for various indoor and outdoor public transport applications. Designed for 24/7 use in all weather conditions our displays provide clear concise passenger information to commuters using railway, bus and ferry stations.

Our applications include:

- Display Time tables
- Service Disruption messages
- Public Information messages
- Custom Marketing
- CCTV Footage to conductor
- Touch Screen Station Way finding signage
- Low powered displays
- Platform Safety Systems
- Bus/Tram Displays
- Light Rail Indicators

Our Passenger Information Displays are modular & custom built, Indoor/Outdoor Use, IP2X – IP66/IP68, Sunlight Readable, High Bright, Range of sizes 10.4" – 82", Internal Heating/Cooling Systems, Vandal/Tamper proof, Audio, Speakers, Various Inputs/Outputs, portrait or landscape modes, Slimline Version Monitors & half height monitors, remote monitoring & true time indicators.

FEATURES

LCD Technology

MetroSpec Passenger Information Displays utilise premium HD LCD panels which provides brilliant visibility and clear concise messages in direct sunlight. This is due to a combination of factors such as the increase in colour visual resolutions, high brightness, using environmentally friendly LED back lighting solutions and providing a wide viewing angle.

Modular Off the Shelf or Custom Built to your requirements

Metromatics are able to offer a quality off the shelf designed passenger information display. However, we do realise that no two projects are the same – Different Connectors, Cables, Low Smoke Halogen requirements, Certified Bracketry, various mounting configurations, vibration testing, touch screen, audio, interfacing to sub systems, display of data, internal controls, wireless configuration and much more. We recognise this and with the support of our team we are able to provide you with a customised build to meet your requirements.

24/7 Operation

Tried and tested to operate 24/7. We have over +2000 of our displays installed in some of the harshest environmental conditions that are experienced in world. With a very low return rate the MetroSpec Passenger Information Displays are built to last.

Exceptional Visibility

Using the latest anti-reflective glass technology, ambient light sensors to provide contrast and LED backlit LCD high bright panels ensures exceptional visibility in all lighting conditions including direct sunlight.

Weatherproof

Metromatics manufacture MetroSpec Passenger Information Displays to an IP Standard for the particular application. An indoor display may have very few elements in which it must operate and therefore can be manufactured to an IP2X or IP4X standard. A Passenger Information Display in an exposed outdoor application, however, may need to operate and withstand weather conditions from the freezing cold, torrential rain to dust and extreme heat and would require extra protection by way of internal heating and cooling units built to an IP65/IP66 Standard. Our standard operating temperature is 0 to 50°C. However, our extended operating temperature is -35°C to 50°C by implementing the MetroSpec Intelligent Internal Environmental Control System into the product.

Anti-Vandalism features

MetroSpec Passenger Information Displays have numerous features to protect the display from damage due to vandalism such as Anti-Graffiti paint, door sensor alarms which can connect directly to the control room to alert staff, shatter proof glass and a strong aluminium enclosure made from a single sheet of folded Aluminium.

Environmental Standards

Environmental impact is a global concern. Our products have developed over the years from CCFL Backlighting to LED which significantly reduces power consumption, making it more environmentally and economically viable, providing low life cycle cost to our customers. Where ever else possible, Metromatics incorporates sound environmental decisions into design, development, manufacture and packaging to reduce our environmental footprint while continuing to deliver a superior product.

Intelligent Internal Environment Control

The Control System developed by Metromatics to be used with the MetroSpec Passenger Information Displays which allows the monitors to operate in extreme weather conditions from -35°C up to +50°C. The internal control system automatically detects the environmental conditions and adjusts the temperature requirements inside the display to allow it to operate normally.

MetroSpec PID Monitoring System (MPMS)

The MPMS System enables customers remotely control and monitor various aspects of the MetroSpec Passenger Information Displays from a remote location via industry standard tools. Customers can remotely control and monitor the temperature, fans, power, contrast, brightness, start up or shut down timers (if required) using any standard SNMP software package.

MetroSpec Content Display Software

MetroSpec Presenter Software is a highly configurable content display system for use with the MetroSpec Passenger Information Displays. It provides a lightweight software solution for the customer to display text, images and video in any configuration. Content can be streamed via any network source or USB drive or via API to allow full integration with exiting customer data sources.

Optional features

As our products are customisable we provide an endless array of optional features which may be required to meet your requirements. Some optional features include: TouchScreens, Audio, different connectors or cables, internal speakers, Media players, wireless connectivity, serial remote control or monitoring, extreme Aux temperature sensors, CCTV, panic points, password protection, remote controls and much more.





METROSPEC S SERIES

Introducing the MetroSpec S Series, our latest high bright LCD Passenger Information Display encompasses a modern, sleek enclosure that houses two LCD panels back to back capturing multidirectional commuter traffic. This sunlight viewable outdoor display is IP65 rated and generally mounted from the railway/light rail station ceiling by wind/vibration certified support droppers at an optimal viewing height from the platform. Other mounting options are also available with the MetroSpec S Series. This design also uses LED Backlit Panels for lower energy consumption and incorporates all our amazing features of our full sized displays.

Sizes

The MetroSpec S-Series is a slimline passenger information display resulting in a thinner, sleeker more modern look. It incorporates taking a full sized LCD Panel and cutting it down into a more rectangular shaped unit. Sizes currently available include 47" ½ Height (which means half the height of a standard 47" panel); 42" ½ Height; 32" 2/3 Height; 32" ½ Height; 22" ½ & 1/3 Height; 19" 2/5 Height.

Brightness & Operational Modes

This panel can be used in portrait or landscape modes with brightness from 400 to 2000 cd/m² ideal for indoor or outdoor passenger or public information applications.

Inputs

The standard input used for the MetroSpec S Series is Ethernet to an internal media player / PC. Other options are available including: VGA/DVI-D Only; Audio Input with 7W Output; Internal Speaker; VGA/HDMI/DVB-T (Digital TV), Stereo, Audio; Media Player, Network Cable or USB and Built in Computer.

Features of MetroSpec S Series Panel

The standard features of the MetroSpec S Series LCD Panel include Image Setting, Source/Volume Control, Language, automatic sharpness enhancement, image retention, dimming control, picture in picture, de-interlacing or Comb Filter, 10 Bit colour processing; ambient light sensor and total turn on time.

Optional features you may wish to implement with your panel could include built in video wall support, diagnostic DC voltage, or an Internal Aux Temperature sensor.

Accessories

The MetroSpec S Series can be controlled by remote control which comes with the display. Other accessories include a quick start guide and VGA cable.

Optional Accessories

Ceiling droppers are the standard mounting bracket offered with the MetroSpec S Series Passenger Information Display. However, other mounting and bracketry options are available such as wind/vibration certified load ceiling droppers; wall mounting; side mounting; and VESA mounting.

Our standard glass is 6.38mm thick and is anti-reflective which is suitable for many locations. However, some locations have constant sunlight or brightness and we generally suggest our optional high UV limiting glass which provides extra protection to the panel by absorbing the heat and in turn reducing the overall heat within the display by up to 15°C whilst maintaining brilliant visibility and your clear messages to commuters.

Bird Deterrents are another option available. We have two types. The bird roller is made from recycled plastic which is mounted on the top of the S-Series on cylinder rods and continuously spin once a bird attempts to perch itself on the top of the unit making the landing very difficult. The other option is the bird spikes.

Protection Hoods are an option for locations where the sun can stream across the screen for certain periods of the day. The protection hood allows consistent display of information regardless of the lighting conditions.

The remote controls which come with the display can be modified to allow password protection thereby providing extra security. There are extra connectivity options available such as wireless, serial/remote control monitoring, and SNMP. The display can be made into an infrared or capacitive touch screen if required.

Standards

The MetroSpec S- Series is built to an IP65 Standard and exceeds EN55022 – CE – IEC60950. It can be built and tested to the following standards as an option EN50155, EN50121-3-2, IEC 61373.



DISPLAY SERIES	MS4238-1000
LCD PANEL	
LCD Panel Size	42 Inches ½ Height
Pixel Pitch	0.4833 x 0.4833 mm
Native Resolution	1920 (H) x 540 (V) pixels RGB Stripe arrangement
Brightness	1000 (Centre 1 point typ.) cd/m²
Contrast Ratio	1400:1 (Typ.)
Colour Depth	8 bit (D), 16.7 Million Colours
Response Time	8msec. (Typ.)
Viewing Angle	Viewing angle free R/L 178° (Min.) U/D 178° (Min.)
Half Light Life Time	4 LED Array, Direct light with driver board
Panel Surface	Hard Coating 3H, Antiglare treatment
Panel Type	Transmissive mode, normally black
Aspect Ratio	16: 4.45
Bezel Area	937.2 mm x 268.6 mm
Active Area	927.94 mm (H) x 260.98 mm (V)
Power Consumption	Total 98W (Logic = 10W, LED Driver=88W)
ENCLOSED MONITOR	
Aluminium	Standard (Option: Stainless Steel)
Enclosure Colour Black	Standard (Option: Other Colours)
Dimensions	485 (H) x 1200(W) x 200 (D)mm
Weight	50kg
Front Glass Anti-Reflective/Laminated	Standard (Optional MetroSpec high UV limiting glass also available)
Ceiling Droppers	Standard (Optional Certified Ceiling Droppers for Wind & Vibration Loads also available)
Single Sided – 1 Panel Only	O
ENVIRONMENT	
Operating Temperature	0°C to +50°C
Optional Extended Operating Temperature which includes Intelligent Internal environmental control system	-35°C to +50°C
Storage Temperature	-20°C to +60°C
Humidity	10%-90%
Intelligent Internal Environmental Control	O
Metromatics High UV Limiting Glass	O
SOFTWARE	
MetroSpec PID Monitoring System (MPMS)	O
MetroSpec Presenter	O

Standard = S
Option = O





Brightness & Operational Modes

This panel can be used in portrait or landscape modes with brightness from 400 to 2500 cd/m² ideal for indoor or outdoor passenger or public information applications.

Inputs

The standard input used for the MetroSpec X Series is VGA/HDMI/DVI-D/RS232 Connectors. Other options are available including: VGA/DVI-D Only; Audio Input with 7W Output; Internal Speaker; VGA/HDMI/DVB-T (Digital TV), Stereo, Audio; Media Player, Network Cable or USB and Built in Computer.

Features of MetroSpec X Series Panel

The standard features of the MetroSpec X Series LCD Panel include Image Setting, Source/Volume Control, Language, ability to daisy chain numerous panels together with its own unique ID setting via RS232, automatic sharpness enhancement, image retention, dimming control, picture in picture, de-interlacing or Comb Filter, 10 Bit colour processing; ambient light sensor and total turn on time.

Optional features you may wish to implement with your panel could include built in video wall support, diagnostic DC voltage, or an Internal Aux Temperature sensor.

Accessories

The MetroSpec X Series can be controlled by remote control which comes with the display. Other accessories include a quick start guide and VGA cable.

Optional Accessories

Vesa Mounting Dimensions (See each model for measurement) are the standard method for mounting the MetroSpec X Series Passenger Information Display. However, other mounting and certified bracketry options are available such as wind/vibration certified load ceiling droppers; wall mounting; side mounting; and more.

Our standard glass is 6.38mm thick and is anti-reflective which is suitable for many locations. However, some locations have constant sunlight or brightness and we generally suggest our optional high UV limiting glass which provides extra protection to the panel by absorbing the heat and in turn reducing the overall heat within the display by up to 15°C whilst maintaining the brilliant visibility and your clear messages to commuters.

Bird Deterrents are another option available. We have two types. The bird roller is made from recycled plastic which is mounted on the top of the X-Series on cylinder rods and continuously spin once a bird attempts to perch itself on the top of the unit making the landing very difficult. The other option is the bird spikes.

Protection Hoods are an option for locations where the sun can stream across the screen for certain periods of the day. The protection hood allows consistent clear display of information regardless of the lighting conditions.

The remote controls which come with the display can be modified to allow password protection thereby providing extra security. There are extra connectivity options available such as wireless, serial/remote control monitoring, and SNMP. The display can be made into an infrared or capacitive touch screen if required.

Standards

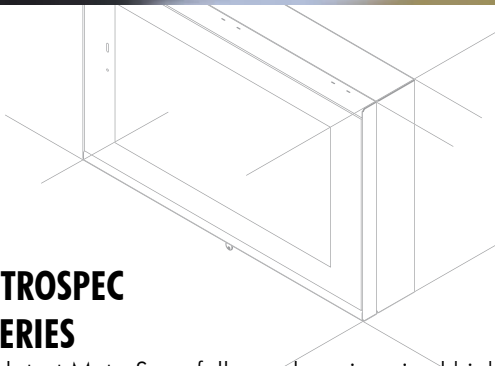
The MetroSpec X- Series is built to an IP66 Standard and exceeds EN55022 – CE – IEC60950. It can be built and tested to the following standards as an option EN50155, EN50121-3-2, IEC 61373.

METROSPEC X SERIES

The latest MetroSpec full panel version sized high bright LCD Passenger Information Display with all the above features are enclosed in a strong, modern enclosure manufactured up to an IP66 standard and available in either portrait or landscape modes in a wide range of sizes and brightness's and can be mounted in various ways.

Sizes

The MetroSpec X-Series is a public or passenger information display which is capable of providing different information commuters require – whether this be time table information, service disruption messages, advertisements or the latest news or a combination of this information can be easily displayed. Sizes currently available in the X series include 32, 42, 47, 55, 65, 72 & 84 inch models.



DISPLAY SERIES	MS32-1200	MS42-1500	MS47-2000	MS55-1000	MS55-1500	MS72-2000	MS72-2500	MS84-2000
LCD PANEL								
LCD Panel Size	32 Inches	42 Inches	47 Inches	55 Inches	55 Inches	72 Inches	72 Inches	84 Inches
Pixel Pitch	0.36375 x 0.36375 mm	0.4845 x 0.4845 mm	0.5415 x 0.5415 mm	0.5415 x 0.5415 mm	0.5415 x 0.5415 mm	0.831x0.831 mm	0.831x0.831 mm	0.831x0.831 mm
Native Resolution	1920 x 1080 RGB Stripe arrangement	1920 x 1080 HD	1920 x 1080 HD	1920 x 1080 HD	1920 x 1080 HD	1920 x 1080 HD	1920 x 1080 HD	3840 x 2160 4KHD
Brightness	1200 (typ.) cd/m ²	1500 (typ.) cd/m ²	2000 (typ.) cd/m ²	1100 (typ.) cd/m ²	1500 (typ.) cd/m ²	2000 (typ.) cd/m ²	2500 (typ.) cd/m ²	2500 (typ.) cd/m ²
Contrast Ratio	1400:1 (Typ.)	3000:1 (typ)	3000:1 (typ)	1200:1 (typ)	2300:1 (typ)	2300:1 (typ)	1200:1 (typ)	1200:1 (typ)
Aspect Ratio	16:9	16:9	16:9	16:9	16:9	16:9	16:9	16:9
Colour Depth	8 bit, 16.7 Million colours	8 bit, 16.7 Million colours	10 bit, 1.07 Billion Colours	8 bit, 16.7 Million colours	8 bit, 16.7 Million colours	8 bit, 16.7 Million colours	8 bit, 16.7 Million colours	10 bit, 1.07 Billion Colours
Response Time	22ms	Max 6.5 ms	Max 15 ms	Max 8 ms	Max 8 ms	Max 12ms	Max 12ms	Max 12ms
Viewing Angle	Viewing angle free R/L 178° (Min.) U/D 178° (Min.)	Viewing angle free R/L 178° (Min.) U/D 178° (Min.)	Viewing angle free R/L 178° (Min.) U/D 178° (Min.)	Viewing angle free R/L 178° (Min.) U/D 178° (Min.)	Viewing angle free R/L 178° (Min.) U/D 178° (Min.)	Viewing angle free R/L 178° (Min.) U/D 178° (Min.)	Viewing angle free R/L 178° (Min.) U/D 178° (Min.)	Viewing angle free R/L 178° (Min.) U/D 178° (Min.)
Half Light Life Time	LED Array, Direct light with driver board	LED Array, Direct light with driver board	LED Array, Direct light with driver board	LED Array, Direct light with driver board	LED Array, Direct light with driver board	LED Array, Direct light with driver board	LED Array, Direct light with driver board	LED Array, Direct light with driver board
Panel Surface	Hard coating (2H), Anti-glare treatment of the front polarizer	Anti-Glare, 3H	Hard coating (2H), Anti-glare treatment of the front polarizer	Hard coating (2H), Anti-glare treatment of the front polarizer	Hard coating (2H), Anti-glare treatment of the front polarizer	Anti-Glare, 3H	Anti-Glare, 3H	Anti-Glare, 3H
Panel Type	Transmissive mode, normally black	Transmissive	Transmissive	Transmissive	Transmissive	Transmissive	Transmissive	Transmissive
Bezel Area	705.6 (H) x 400.1 (V) mm	938.6 (H) x 531.5 (V) mm	1049 (H) x 593 (V) mm	1217(H) x 688 (V) mm	1217(H) x 688 (V) mm	1606 (H) x 908 (V) mm	1606 (H) x 908 (V) mm	1870 (H) x 1057 (V) mm
Active Area	698.4 (H) x 392.9 (V) mm	930.24 (H) x 523.26 (V) mm	1039.7 (H) x 584.82 (V) mm	1209.6 (H) x 680.4 (V) mm	1209.6 (H) x 680.4 (V) mm	1595 (H) x 898 (V) mm	1595 (H) x 898 (V) mm	1860 (H) x 1046 (V) mm
ENCLOSED MONITOR								
Aluminium	Standard (Optional: Stainless Steel)	Standard (Optional: Stainless Steel)	Standard (Optional: Stainless Steel)	Standard (Optional: Stainless Steel)	Standard (Optional: Stainless Steel)	Standard (Optional: Stainless Steel)	Standard (Optional: Stainless Steel)	Standard (Optional: Stainless Steel)
Enclosure Colour Black	Standard (Optional: Other Colours)	Standard (Optional: Other Colours)	Standard (Optional: Other Colours)	Standard (Optional: Other Colours)	Standard (Optional: Other Colours)	Standard (Optional: Other Colours)	Standard (Optional: Other Colours)	Standard (Optional: Other Colours)
Dimensions	605 (H) x 920 (W) x 170.6 (D)mm	718.4 (H) x 1129 (W) x 155.6 (D)mm	790 (H) x 1270 (W) x 220.1 (D) mm	830 (H) x 1370 (W) x 204.3 (D) mm	828 (H) x 1370 (W) x 204.3 (D) mm	1180 (H) X 1168 (W) X 220 (D) mm	1180 (H) X 1168 (W) X 220 (D) mm	2104 (H) X 1298 (W) X 220 (D) mm
Weight	50kg	55kg	75kg	70kg	70kg	90kg	90kg	90kg
Front Glass Anti-Reflective/Laminated	Standard (Optional MetroSpec high UV limiting glass also available)	Standard (Optional MetroSpec high UV limiting glass also available)	Standard (Optional MetroSpec high UV limiting glass also available)	Standard (Optional MetroSpec high UV limiting glass also available)	Standard (Optional MetroSpec high UV limiting glass also available)	Standard (Optional MetroSpec high UV limiting glass also available)	Standard (Optional MetroSpec high UV limiting glass also available)	Standard (Optional MetroSpec high UV limiting glass also available)
Vesa Mounting Dimensions	200 x 200	200 x 200	600 x 400	600x600	600x600	600x600	600x600	600x600

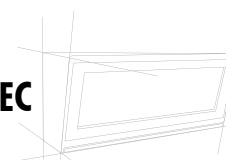


DISPLAY SERIES	MS32-1200	MS42-1500	MS47-2000	MS55-1000	MS55-1500	MS72-2000	MS72-2500	MS84-2000
ENVIRONMENT								
Operating Temperature	0°C to +50°C	0°C to +50°C	0°C to +50°C	0°C to +50°C	0°C to +50°C	0°C to +50°C	0°C to +50°C	0°C to +50°C
Optional Extended Operating Temperature which includes Intelligent Internal environmental control system	-35°C to +50°C	-35°C to +50°C	-35°C to +50°C	-35°C to +50°C	-35°C to +50°C	-35°C to +50°C	-35°C to +50°C	-35°C to +50°C
Storage Temperature	-20°C to +60°C	-20°C to +60°C	-20°C to +60°C	-20°C to +60°C	-20°C to +60°C	-20°C to +60°C	-20°C to +60°C	-20°C to +60°C
Humidity	10%-90%	10%-90%	10%-90%	10%-90%	10%-90%	10%-90%	10%-90%	10%-90%
Intelligent Internal Environmental Control	○	○	○	○	○	○	○	○
Metromatics High UV Limiting Glass	○	○	○	○	○	○	○	○
SOFTWARE								
MetroSpec PID Monitoring System (MPMS)	○	○	○	○	○	○	○	○
MetroSpec Presenter	○	○	○	○	○	○	○	○

Standard = S Option = ○



METROSPEC C SERIES



The MetroSpec Real-Time Digital LCD Clock is a stand out feature on any train platform or concourse waiting area. The current time is displayed in 24 hour or 12 hour format to the second as it communicates via an embedded connection directly back to the Network Time Server.

Sizes

Sizes currently available in the MetroSpec C series include 19" 2/5 & 32" 3/8 inch models. Other sizes are available on request.

Brightness & Operational Modes

This panel can be used in landscape modes with brightness from 400 to 2000 cd/m² ideal for indoor or outdoor passenger or public displaying time applications.

Inputs

The standard input used for the MetroSpec C Series is VGA/HDMI/DVI-D/RS232 Connectors. Other options are available including: VGA/DVI-D Only; Audio Input with 7W Output; Internal Speaker; VGA/HDMI/DVB-T (Digital TV), Stereo, Audio; Media Player, Network Cable or USB and Built in Computer.

Features of MetroSpec C Series Panel

The standard features of the MetroSpec C Series LCD Panel include Image Setting, Source/Volume Control, Language, ability to daisy chain numerous panels together with its own unique ID setting via RS232, automatic sharpness enhancement, image retention, dimming control, picture in picture, de-interlacing or Comb Filter, 10 Bit colour processing; ambient light sensor and total turn on time.

Optional features you may wish to implement with your panel could include built in video wall support, diagnostic DC voltage, or an Internal Aux Temperature sensor.



Accessories

The MetroSpec C Series can be controlled by remote control which comes with the display. Other accessories include a quick start guide and VGA cable.

Optional Accessories

Ceiling droppers are the standard mounting bracket offered with the MetroSpec C Series Digital Clock. However, other mounting and bracketry options are available such as wind/vibration certified load ceiling droppers; wall mounting; side mounting; and VESA mounting. The C Series Clock can either be single sided or double sided to provide time to commuters from both directions.

Our standard glass is 6.38mm thick and is anti-reflective which is suitable for many locations. However, some locations have constant sunlight or brightness and we generally suggest our optional high UV limiting glass which provides extra protection to the panel by absorbing the heat and in turn reducing the overall heat within the display by up to 15°C whilst maintaining the brilliant visibility and your clear messages to commuters.

Bird Deterrents are another option available. We have two types. The bird roller is made from recycled plastic which is mounted on the top of the S-Series on cylinder rods and continuously spin once a bird attempts to perch itself on the top of the unit making the landing very difficult. The other option is the bird spikes.

Protection Hoods are an option for locations where the sun can stream across the screen for certain periods of the day. The protection hood allows consistent display of information regardless of the lighting conditions.

The remote controls which come with the display can be modified to allow password protection thereby providing extra security. There are extra connectivity options available such as wireless, serial/remote control monitoring, and SNMP. The display can be made into an infrared or capacitive touch screen if required.

Standards

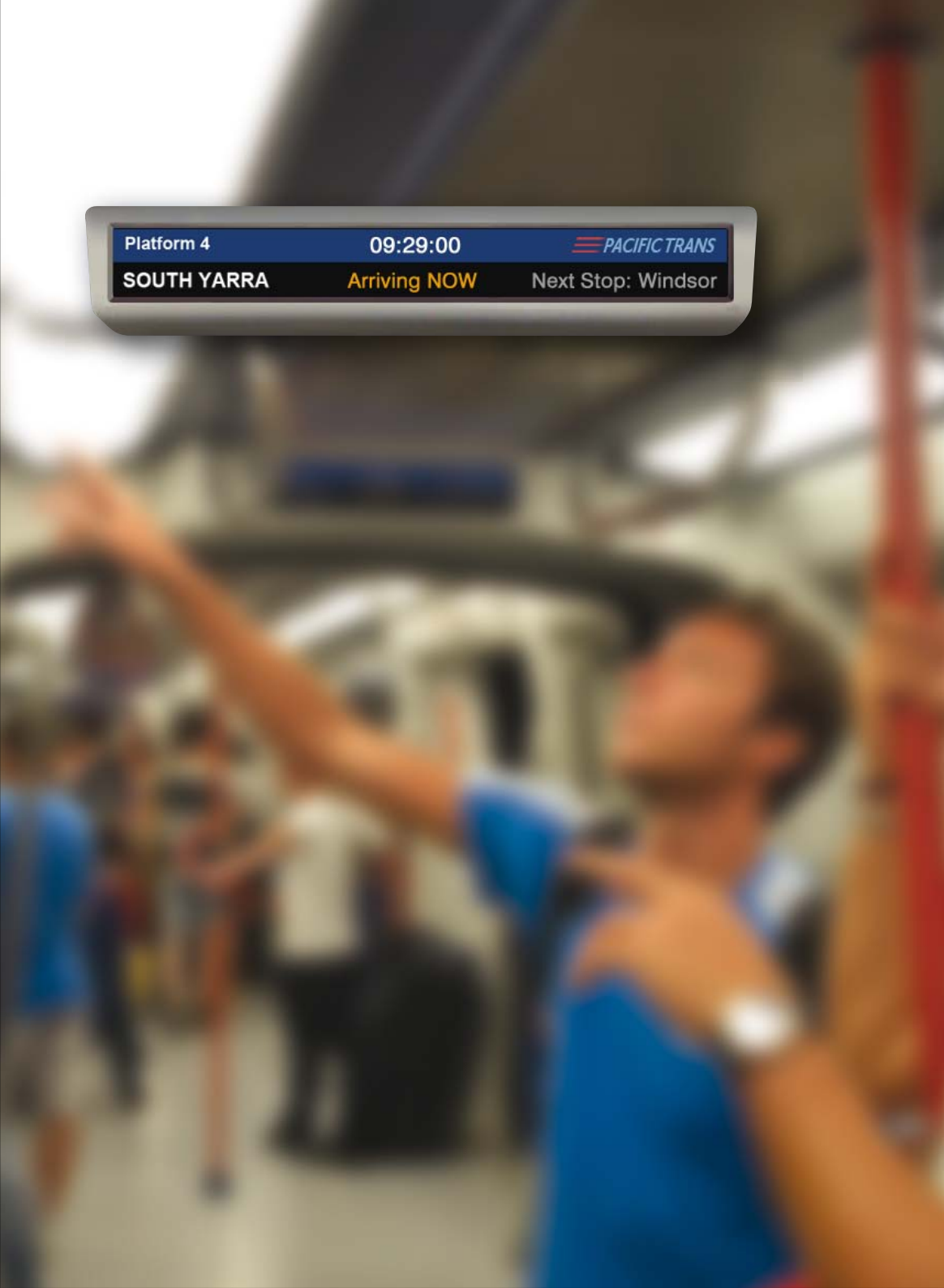
The MetroSpec C- Series is built to an IP65 Standard and exceeds EN55022 – CE – IEC60950. It can be built and tested to the following standards as an option EN50155, EN50121-3-2, IEC 61373.

DISPLAY SERIES	MS1925-450	MS3238-1200
LCD PANEL		
LCD Panel Size	19 Inches 2/5 Height	32 Inches 3/8 Height
Pixel Pitch	0.294 x 0.294 mm	0.36375 x 0.36375 mm
Native Resolution	0.36375 x 0.36375 mm	
Brightness	450 (Centre 1 point typ.) cd/m²	1200 (Centre 1 point typ.) cd/m²
Aspect Ratio	16:3.60	16:3.42

Contrast Ratio	1000:1 (Typ)	900:1 (Typ.)
Colour Depth	16.7M Colours (RGB 6-Bit + Hi FRC)	8 bit (D), 16.7 Million Colours
Response Time	5 msec.	8 msec.
Viewing Angle	Viewing angle free R/L 160° (Min.) U/D 170° (Min.)	Viewing angle free R/L 178° (Min.) U/D 178° (Min.)
Half Light Life Time	Min. 50000 Hours LED Backlit LCD Panel	Min. 50000 Hours LED Backlit LCD Panel
Panel Type	Transmissive mode, normally black	Transmissive mode, normally black
Active Area	376.32 (H) x 114.76 (V) mm	698.4 (H) x 145.5 (V) mm
Power Consumption	14.5W (Typ.)	Total 82W (Logic =7.32W, LED Driver=74W)

ENCLOSED MONITOR		
Aluminium	Standard (Option: Stainless Steel)	Standard (Option: Stainless Steel)
Enclosure Colour Black	Standard (Option: Other Colours)	Height
DIMENSIONS		
Weight	10kg	25kg
Front Glass Anti-Reflective/Laminated	Standard (Optional MetroSpec high UV limiting glass also available)	Standard (Optional MetroSpec high UV limiting glass also available)
Ceiling Droppers	Standard (Optional Certified Ceiling Droppers for Wind & Vibration Loads also available)	Standard (Optional Certified Ceiling Droppers for Wind & Vibration Loads also available)
Single Sided – 1 Panel Only	○	○
ENVIRONMENT		
Operating Temperature	0°C to +50°C	0°C to +50°C
Optional Extended Operating Temperature which includes Intelligent Internal environmental control system	-35°C to +50°C	-35°C to +50°C
Storage Temperature	-20°C to +60°C	-20°C to +60°C
Humidity	10%-90%	10%-90%
Intelligent Internal Environmental Control	○	○
Metromatics High UV Limiting Glass	○	○
SOFTWARE		
MetroSpec PID Monitoring System (MPMS)	○	○
MetroSpec Presenter	○	○

Standard = S Option = ○



METROSPEC O SERIES

The MetroSpec O Series displays is Metromatics range of on-board passenger information displays providing commuters with invaluable information such as next stop, route and real time location information. Other extra information that can be provided is service messages relating to transfer information for upcoming stops and even advertising for an extra revenue stream for the public transport operator. Utilising a LCD display, information is conveyed in a more attractive, easy to read format but the real advantage of the MetroSpec O Series is that it can fit in the interiors of public transport rail and tram cars where space can be limited.

Sizes

Sizes currently available in the MetroSpec O series include 21.5" $\frac{1}{4}$ Height. Other sizes are available on request.

Brightness & Operational Modes

This panel can be used in landscape modes with brightness from 350 to 700 cd/m² ideal for indoor passenger information system applications.

Inputs

The standard input used for the MetroSpec O Series is VGA/HDMI/DVI-D/RS232 Connectors. Other options are available including: VGA/DVI-D Only; Audio Input with 7W Output; Internal Speaker; VGA/HDMI/DVB-T (Digital TV), Stereo, Audio; Media Player, Network Cable or USB and Built in Computer.

Features of MetroSpec S Series Panel

The standard features of the MetroSpec O Series LCD Panel include Image Setting, Source/Volume Control, Language, automatic sharpness enhancement, image retention, dimming control, picture in picture, de-interlacing or Comb Filter, 10 Bit colour processing; ambient light sensor and total turn on time.

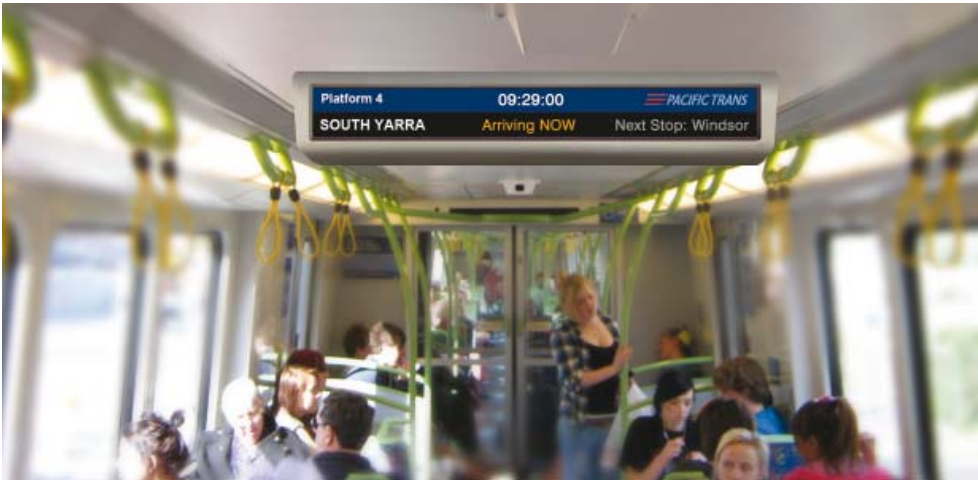
Optional features you may wish to implement with your panel could include diagnostic DC voltage, or an Internal Aux Temperature sensor.

Optional Accessories

Open Frame System with mounting brackets and embedded pc for internal installation is included. However, a fully compatible system with Perspex or toughened glass can be provided to meet your requirements.

Standards

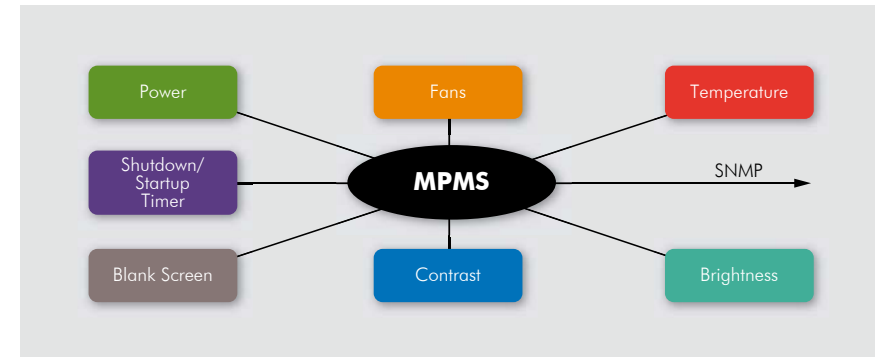
The MetroSpec C- Series is built to an IP54 Standard and exceeds EN55022 – CE – IEC60950. It can be built and tested to the following standards as an option EN50155, EN50121-3-2, IEC 61373.



DISPLAY SERIES	MS21-51/4
LCD PANEL	
LCD Panel Size	21.5 Inches 1/4 Height
Pixel Pitch	0.2475 x 0.2475 mm
Native Resolution	1920 (H) x 250 (v)
Brightness	550 (Centre 1 point typ.) cd/m²
Contrast Ratio	1000:1
Colour Depth	16.7M Colours (RGB 6-Bit + A-FRC)
Aspect Ratio	16:4.45
Response Time	5 msec. (Typ.)
Viewing Angle	Viewing angle free R/L 178° (Min.) U/D 178° (Min.)
Half Light Life Time	Min. 50000 Hours LED Backlit LCD Panel
Panel Type	Transmissive mode, normally black
Active Area	376.32 (H) x 114.76 (V) mm
Power Consumption	7.5mA (Typ.)
Interface	RS485/Ethernet
ENCLOSED MONITOR	
Open Frame with embedded PC & Mounting frames for internal installation	Standard (Options: Glass/Perspex/Fully Enclosed)
Dimensions	496 (H) x 87 (V) x 10.5 (D) mm
Weight	4.6kg
ENVIRONMENT	
Operating Temperature	0°C to +50°C
Optional Extended Operating Temperature which includes Intelligent Internal environmental control system	-35°C to +50°C
Storage Temperature	-20°C to +60°C
Humidity	10%-90%
Intelligent Internal Environmental Control	O
Metromatics High UV Limiting Glass	Not Required for Internal Installation
SOFTWARE	
MetroSpec Presenter	O

Standard = S
Option = O





METROSPEC SOFTWARE SOLUTIONS

The MetroSpec suite of software products has been designed to compliment the MetroSpec line of industry-leading displays. Our MetroSpec software products are ideal for customers who would like additional remote monitoring and control of their displays (MPMS) or customers who do not have an existing system to display content to their target audience (MetroSpec Presenter Software).

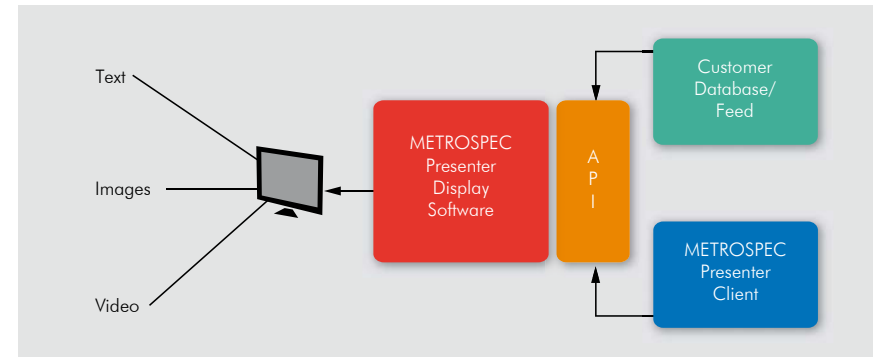
MetroSpec PID Monitoring System (MPMS)

The MPMS system enables customers to remotely control and monitor various aspects of the MetroSpec display from a remote location via industry-standard tools.

MPMS has the following features:

- Allows the customer to remotely monitor and control temperature, fans, power, contrast, brightness, startup shutdown timers and screen blanking.
- Communicates using SNMP to allow control and monitoring by standard IT monitoring software packages.
- Runs on Windows or Linux onboard the MetroSpec display's internal PC.





METROSPEC PRESENTER SOFTWARE

MetroSpec Presenter is a highly-configurable content display system for use with MetroSpec displays. It has been developed in-house with a focus on providing a lightweight software solution for the display of text, images and video in any configuration required by the customer.

The key features of MetroSpec Presenter are:

- Runs onboard the display's internal ARM Cortex-based single board computer
- Solid-state storage for operating system providing increased reliability and eliminating hard disk failure due to heat
- Layout of on-screen content is configurable to meet customer requirements
- Able to display text, images and video simultaneously
- Able to display text animation
- Able to stream content from any network source or attached USB drive
- Can be controlled over network via the MetroSpec Presenter Client software (optional)
- Can be controlled over network via API to allow full integration with existing customer data sources





METROSPEC LPD TOTEM

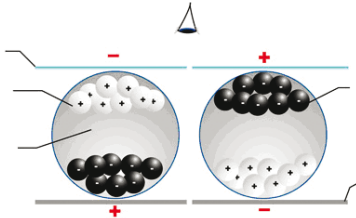
The MetroSpec LPD Totem operates by reflecting light making the time table information displayed on the panel stand out when in dim light and brighten when in direct sunlight. Once the information is set on the screen this bistable display is capable of holding the image indefinitely without drawing electricity or any power which results in saving money in power costs, lengthening the life of the battery and improving the overall environmental rating.

- Ultra low power
- Sleek, light weight design
- Readable in direct sunlight & dim light
- High Contrast with wide viewing angle
- No backlighting required
- Green friendly provide CO2 reduction
- USB/Wireless/Bluetooth Capabilities
- RoHS Compatible
- Solar panel compatible
- Available in Black & White and Colour
- Rugged Scratchproof & impactproof.



How it works

The LPD consists of a special film with tiny microcapsules which are all positively charged white and negatively charged black within a transparent fluid and contained between two plates. When a negative charge is applied to the front of the display it causes the white particles to move to the top and white writing appears on a black background. When a positive charge is applied to the front of the display black writing/graphics appear on a white background.



The MetroSpec LPD Totem can have static messages sent to it every 20-30 seconds via Wireless LAN/ USB/ Bluetooth display networks capable of receiving and displaying complex, up to date information from a centralised remote source making it ideal for public transport rail, bus and ferry applications. The applications for this industry are endless such as providing timetable information, displaying service disruption messages, delays, public information, point of sale information, signage changes and much more.

The MetroSpec LPD Totem can be mounted as a modular addition unit for Bus Totems. Contained its own protective weatherproof case the LPD Totem display can withstand the elements and vandalism with the option of shatterproof & high impact protection. Solar Power with trickle feed is an ideal power solution. Maintenance on this type of product is relatively easy – remove and replace. Other mounting options are available – array, portrait, landscape, wall, - please contact us to find out more information.

The applications and options are endless with the MetroSpec LPD Totem contact Metromatics today so we can customise the system to meet your public infrastructure requirements.





METROSPEC CONTROL ROOM VIDEO WALL SOLUTIONS

Innovative leading edge technology

The MetroSpec trademark is manufactured by Metromatics – Innovators of Custom Built & off the Shelf Industrial, Commercial and Sunlight readable High Bright LCD & LED displays. Our high quality, thin bezel screens in conjunction with our leading edge Control room display software, project management team, engineers and production technicians can design, install and commission your solution. Giving you the ultimate Digital Control Room Video Wall Solution for your application.

Applications & specifications

The MetroSpec Digital Video wall solution utilizes high quality commercial grade 46" and 55" screens which have total bezel widths of 5.6mm ensuring a virtually seamless video display.

The list of applications for the MetroSpec Digital Video Wall solution is almost endless as it can capture attention, provide security monitoring or control in critical event scenarios, or deliver a message larger than life for advertising or other visual broadcasts and is a sure fit for:

Our Control Room solutions include:

- Corporate applications such as Video Conferencing
- Sporting and Stadium applications
- Airport applications
- Hospitality applications
- Control Room applications
- Universities & Schools
- Emergency Operation Centres
- Public Information applications
- Telecommunications applications
- Transportation applications



Features of our LCD Video Wall include:

- 46" and 55" commercial grade LCD screens
- D-LED back light, 700nit brightness options
- Standard and High Bright Options available
- Full HD resolution
- Lightweight LCD panels as low as 9 KG per screen
- A total bezel width of 5.6 mm creating a virtually seamless video wall
- Easy installation allows almost unlimited configurations of screens in portrait and / or landscape modes
- A mounting system that allows easy servicing and maintenance
- User-friendly software that allows content management & scheduling of multi displays from multiple sources on the one video wall
- Eco friendly, low wattage display panels

HIPERWALL COMPONENTS



The Displays Nodes display all content as directed by the Controller, including Screen Senders, Streamers and content stored on the wall in advance. Each display node consists of a display device and a PC to drive that display. The PC can be embedded in the display or external.



The Controller manages how content is displayed on the wall. It enables the operator to control the size and location of each object as easily as moving and resizing windows on a PC desktop.



Secondary Control Nodes act as remote extensions of the Controller, providing the ability to control content selection from multiple locations simultaneously, both on site and off site.

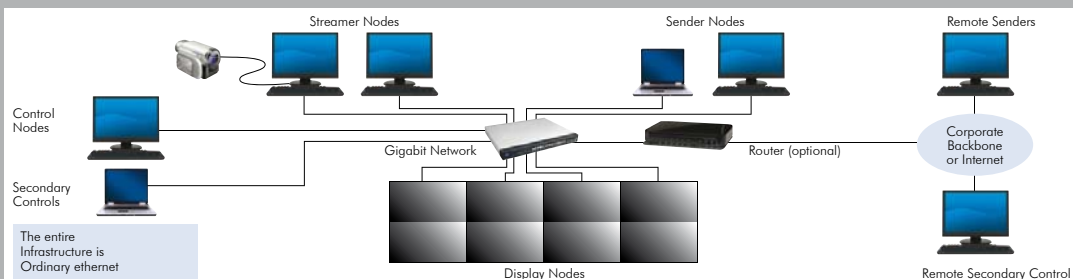


Screen Senders are ordinary PCs that "send" constantly updated copies of their screen to the wall. This software runs on any computer that supports full Java, including Windows, Linux and Mac.



Streamers feed live or recorded feed live or recorded video to the wall from cameras, DVD players and other video sources. Most streamers are PCs with video capture cards to support external video sources.

NETWORK TOPOLOGY



Control Room Software applications

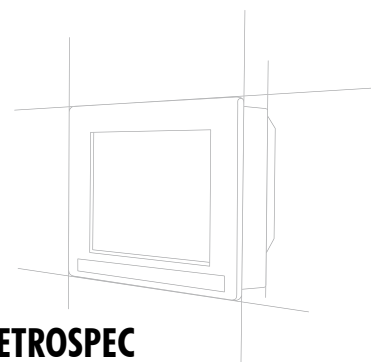
Using our Hiperwall Control Room Software solution in conjunction with our Metrospec LCD/LED display panels allows for ultra-high resolution images from multiple video sources to be viewed on part or all of the wall, with zoom functions to see the finest of image detail.

Some Benefits of the Hiperwall software solution are

Elimination of specialised servers, video hardware, matrix switches and distribution amplifiers.

- Lower cost, complexity and size
- Provides for greater configuration flexibility
- Eliminates scalability limitations
- Provides for future expansion over time
- CAT6 Ethernet cabling means its simpler to install, lower cost and removes short cable run limitations
- Provides a distributed architecture
- Maintains performance for small or large deployments





METROSPEC RUGGED INDUSTRIAL 12.1" PANEL PC

MS12 1600 PC

Ideal for Rail, Maritime and Industrial applications requiring embedded processing and operation in outdoor and harsh environments.

Available in numerous configurations including fully sealed, front bezel seal, VESA mount and display only model.

- 1600 Nits high bright
- LED backlight
- Rugged aluminium/stainless
- Case and bezel
- Embedded computer
- IP66
- Programmable function keys



DISPLAY SERIES	MS12 1600 PC
Chassis & Construction	Sealed IP 66, Marine Grade Aluminium, Machined Front Bezel, Corrosion protection
Screen Size	12.1"
Resolution Capabilities	XGA
Pixel Format	1024x768
Viewing Angle	Left / Right: 80°/80° UP / Down: 80°/80°
Active Display Area	245.8mm (w) x 184.3mm (h)
Contrast Ratio	750:1
Brightness	1600 Nits
Backlight MTBF	50,000 Hours Typical
Response Speed	6 msec
Glass	Optional 6mm Anti Reflective
Input/Output Connectors	IP 68, USB, VGA, Ethernet, Power
Optional	User I/O, Serial
Power Source	12VDC
Speakers	IP 66 Integrated Speakers
Temperature	Operating: -30° to 70°C
Embedded PC	Intel 1.6GHz Atom Processor, 1GB RAM, CF Card Slot
Touch Screen	Capacitive (others available on request)
Dimensions	347mm (w) x267mm (h) x 126mm (d)
Mounting	Panel Mount

Options = Touch Screen, stainless steel and autolight adjust





INSTALLATIONS

We have had great success with our MetroSpec branded LCD Passenger Information Displays and Outdoor Displays products. Some of our installations include:

Northern & Inner Northern Busways – High Bright Passenger Information Displays – RBH, Boggo Road, PA Hospital, King George Square

Richmond & North Melbourne Stations – High Bright Passenger Information Displays for Concourse Entry & Platform Stations

QR Rail – High Bright Passenger Information Displays – Central, Roma St, Fortitude Valley, Toowong, Bowen Hills, Narangba, Albion and more

Parliament, Flinders Street, Flagstaff & Central Stations Melbourne – Metro Trains – Interface Consoles and PIDS

Adelaide City Train Upgrade – Passenger Information Displays

Curved Station Displays – Rail Driver Safety Displays for curved platforms in Sydney

Auckland Station Upgrade – 42" Passenger Information Displays and Real Time Software

Sydney Ferries – Industrial LCDs, Bollards, Vessel Displays, Public Information and Outdoor Displays at Ferry venues such as Circular Quay, Manly, Balmain, Milsons Point and others.

Taronga Zoo, Sydney – Outdoor Public Information Display

Federation Square, Melbourne – Touch Screen Information Kiosks with inbuilt Web Cameras

Australian Navy with Prime Contractor – ANZAC Frigate Upgrade – providing project management, design, integration and testing of Class A Large Format Display Systems

Perth City Railway Upgrade – Bracketry & Passenger Information Displays

Port Melbourne Pier – Totem Information Displays

Gold Coast Light Rail – Double Sided Slimline Outdoor PIDS from Griffith University to Broadbeach

We have over 2000+ MetroSpec Passenger Information Displays and various other formats installed in the public Australasian transport network with great success over the last 8 years. Metromatics provides customisable Public, Passenger, Outdoor and Indoor Information Displays for Public Transit applications – let us provide your next project solution.



METROSPEC



Metrospec proudly manufactured by Metromatics



Head Office: 25 Flinders Parade PO Box 1146 North Lakes QLD 4509 Brisbane Australia +61 7 3868 4255

www.metromatics.com.au email: sales@metromatics.com.au