



# MultiTaction® Cell 55" Embedded

Multiuser interactive LCD for single display applications

**MT550W7 MultiTaction Cell 55" Full HD LCD Embedded Windows 7**



*MultiTaction® Cell 55" Embedded supports unlimited number of concurrent touch events and includes an integrated a full Win 7 PC inside the display for robust single-display installations.*

The MultiTaction® Cell 55" Embedded is an interactive multiuser display that provides the world's most advanced set of touch capabilities. With its ultra-fast computer vision based touch sensing system, it can accommodate an unlimited number of touches and users simultaneously and even recognize real life objects. MultiTaction displays allow engaging, intuitive user experiences on a large scale.

The Full-HD LCD is only 10 cm (4 inches) deep in the edges and 20 cm (8 inches) deep in the middle. It includes an embedded Windows 7 PC with the Intel Core i7 processor. The all-in-one design allows multi-touch applications to be run without an external computer. Its frameless thin bezel design enables the display to be embedded in custom-designed furniture without the hassle of an external PC placement.

## MultiTaction Cell 55" Embedded

- 55" Full HD LCD. Depth only 20 cm (8 inches).
- Computer Vision Through Screen system tracks unlimited touch points, including hands, fingers, fingertips, 2D markers, real-life objects.
- Hybrid tracking mode eliminates external lighting issues.
- Full Windows 7 PC with an Intel Core i7 CPU inside.
- Use as wall or table. Mountable in any position or incline.
- Ultra-fast. Up to 200 fps tracking.
- Frameless thin bezel design with smooth edge-to-edge front safety glass.
- 60,000+ hours expected lifetime, low maintenance.

### /// Unlimited Touch

The MultiTaction Cell 55" Embedded provides the world's most advanced set of touch capabilities. It accommodates an unlimited number of users and interacts with objects with ultra-fast response time.

### /// Embedded Power

The processing power of the embedded PC allows robust all-in-one single display installations to be placed virtually anywhere with minimal space requirements.

### /// Unlimited Integration

The product has a frameless thin bezel design and can easily be embedded in custom designed furniture, walls and tables.



# MultiTaction® Cell 55" Embedded

LCD panel

Aluminium frame

Backlight

Electronics

Cooling backplate



MULTITACTION® technologies

CVTS – Computer Vision Through Screen

BEC – Integrated Backlight Emitter Camera

MTS – Matrix Tracking System

EHTS – Extensible Hybrid Tracking Engine

MFTO – Multi Format Tracking Output

## MultiTouch Ltd's MultiTaction Technology

- Computer Vision Through Screen (CVTS) recognizes unlimited number of fingertips, fingers, hands and objects simultaneously.
- Extensible Hybrid Tracking System (EHTS) eliminates sensitivity to external lighting.
- Integrated Backlight Emitter Camera (IBEC) modules with embedded Matrix Tracking System (MTS) provide the industry's only touch system integrated into the LCD backlight plane.
- Works on Mac, Linux and Windows environments.
- MultiTaction Engine provides tracking output in all common formats and works with available software development kit to utilize all advanced features.



You can use the Full HD display on a wall or as a table.



Cells are designed to be embedded into custom furniture and structures.



# MT550W7 MultiTaction Cell 55" Full HD LCD Embedded Windows 7 Display Specifications

## Display Specifications

Display Technology	TFT LCD
Display Size	55" 16:9 Wide
Native Resolution	Full HD 1920 x 1080
Display Colors	16.7 million
Display Active Area	1209 x 680 mm
Pixel Pitch	0.63 x 0.63 mm
Pixel Response Time	8ms grey to grey
Brightness	400 cd/m <sup>2</sup>
Contrast Ratio	4000 :1 typical
Picture Frame Rate	60 Hz
Backlight	White LED Matrix Array
Viewing Angle	178

## Touch Sensing Hardware

Touch technology	Computer Vision Through Screen
Tracking Speed	Up to 200 fps
IR Source & cameras	Integrated Backlight Emitter Camera modules
IR Wavelength	850 nm

## Touch Surface

Display Safety Glass	Tempered 4mm Optwhite Glass covering whole front surface
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## Embedded Computer Specifications

CPU	Intel Core i7 Quad Core
RAM	8 GB
Hard disk	128 GB SSD
Graphics	NVIDIA GTS450 1GB
Operating system	Windows 7 64-bit ENG

## Interfaces

Video Input	DVI-D, DisplayPort
Control Input	USB B, Ethernet
Auxiliary input for keyboard, mouse, and extra memory	USB A
Audio out	RCA
Power Connector	IEC C14

## Electrical Specifications

Power Supply	100-240 VAC 50/60 Hz
Power Consumption	490W

## Touch Sensing Details

Tracking Software	Embedded MultiTaction Extensible Hybrid Tracking Engine
Touch Input Types	Single finger, multiple fingers, single hand, multiple hands and users, objects with optical markers. Click, hold and drag
Hand Recognition	Each finger identified to certain hand
Object Recognition	Supported with 2D fiducial markers
Number of Simultaneous Touch Inputs	Unlimited <sup>1)</sup>
Number of Simultaneous Users	Unlimited (separate hands) <sup>1)</sup>
Positional accuracy	2 mm, directional compensation
Relative accuracy	Sub-pixel accuracy
Touch Latency	10 ms typical <sup>2)</sup>
Tracking Data Outputs/APIs	Multi-Format Tracking Output: Low level C++, TUIO, XML stream, Windows 7 Touch
Operating System Support	Windows 7. (Linux, Mac OS X with external computer)

Development Environment Support	Most major programming languages and environments (e.g. MS Surface 2 SDK, Win 7 tools, TUIO-compatible systems) <sup>3)</sup>
Software Development Kit	Cornerstone SDK available for C++/OpenGL (Windows 7, Linux, Mac OS X)
Stackability	Up to 24 Cells can be connected to run a single multitouch application with external computer

## Environment Specifications

Operating Temperature	0 to +35 degrees C
Storage Temperature	-10 to +60 degrees C <sup>4)</sup>
Relative Humidity	Non-condensing 80%

## Dimensions and Weight

Physical Dimensions	1204 x 715 x 199 mm
Bezel width	16 mm (bottom & sides), 17 mm (top)
Weight	40 kg (+5 kg for two legs)
Color	Black
Shipping Dimensions	tbd
Shipping Weight	tbd

## Display Mounting

VESA Mount	800 x 400 mm, M8 screws
Mounting positions	Vertical
Horizontal	
Angled position	
Table position	

## Cooling

Cooling system	Forced Air
Convection method	Low Noise Variable Speed Internal Fans
Noise Level	15 - 25 dBA

## Miscellaneous

Agency Approvals	CE
RoHS Compliant	Yes
Expected Lifetime	Over 60,000 h
Warranty	1 Year

## Sales Package Contents

Display Unit	1
Power Cords	5 m, EUR, US, GB
Digital Video Cable	DVI-D 5 m
USB A-B Cable	5 m
Cat5e Ethernet Cable	5 m
Display stand	Table stand for landscape/portrait use
Protective/autocalibration sheet	1
Mounting rail bits	4 pcs
Warranty Card	
Quick Start Guide	
Product Manual	English version

- 1) Practically limited by how many people can fit next to a display array.
- 2) Measured from touch to processed tracking data output. Overall latency is more and depends on the computer, operating system and application used.
- 3) See MultiTouch Cornerstone data sheet for more details.
- 4) Allow at least two hours for temperature normalization before switching on.

Specifications subject to change without notice.



# MT550W7 Dimensions



This is a MultiTaction 2D barcode.  
Place it on a MultiTaction demo table.

All dimensions in millimeters



The MultiTaction® Cell 55" is only 20 cm (8") deep, but over 120 cm (47") wide and over 71 cm (28") tall.

A pair of table stand supports for landscape or portrait mounting are included.

### Official MultiTaction® Cell 55" video:

<http://www.youtube.com/multitouchfi#p/a/u/0/7ve44jMGrvk>

### MultiTaction® Cell 55" Technology video:

<http://www.youtube.com/multitouchfi#p/a/u/1/klwpc1PDQWY>

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