



# Model: ECH2010-SIP-TR

20.1" Stainless Steel Chassis LCD,  
Monitor with Resistive Touch

**ECHXXX-SIP Series:** Rugged Completely Sealed IP66/NEMA4X Stainless Steel Chassis/Surface Mount  
(Optional Integrated All-in-One PC Fanless and Touchscreen Solution)

## Features Highlights:



Water Proof Solution, Full IP/NEMA4 Rating  
front and back  
Stainless and Aluminum Housing Chassis Design

Glass Protective Glass at front

Optional High Brightness and Touch screen



- IP65 Water and Dust proof connection for a higher protection
- All Connectors are facing back with IP66 water proof connectors

# Stainless Steel Chassis LCD Monitor

## Features:

- 1600 x 1200 Native resolution, 300 cd/m<sup>2</sup> brightness, 160° horizontal/vertical viewing angles.
- Modular mechanism design provides flexible product configuration and easy maintenance.
- Optional to built-in touch screen for interactive application.
- Stainless Steel Enclosure.

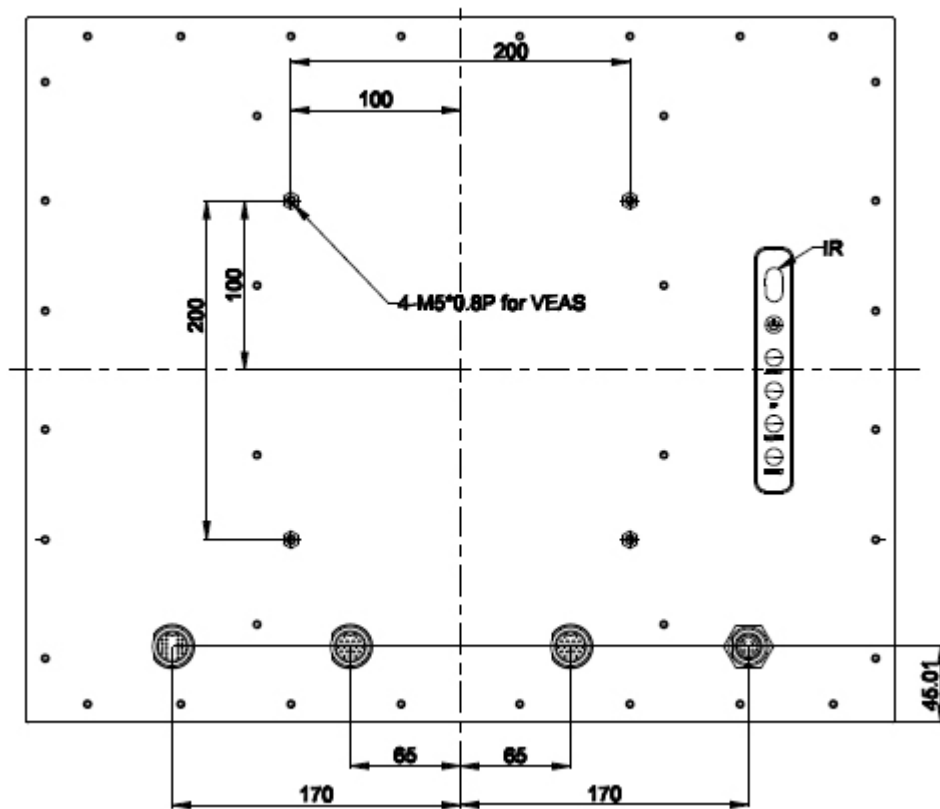
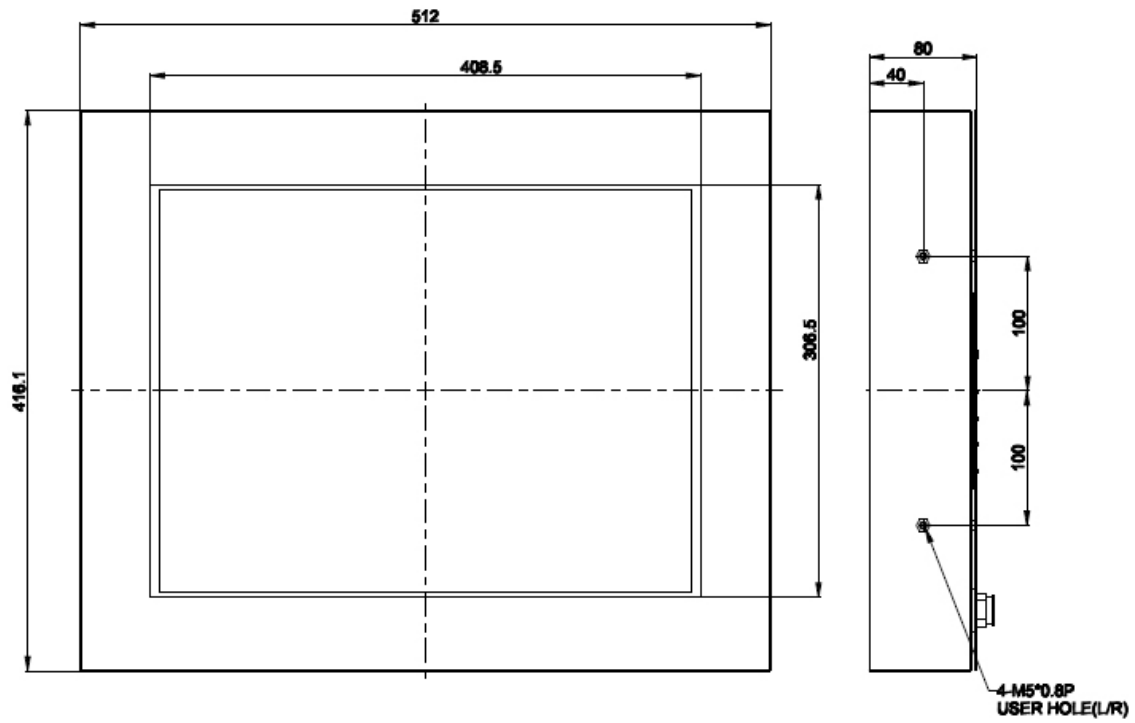
## Specification:

<b>Panel</b>	Cell Type / Glass Surface	TFT LCD / Black Anti-Glare, low reflection coating	
	Aspect Ratio / Size	4 : 3 / 20.1" viewable diagonal area	
	Active Area / Pixel Pitch	408.0(H) x 306.0(V) mm / 0.255(H) x 0.255(V) mm	
	Native Resolution / Colors	1600(H) x 1200(V) / 16.7 Million	
	Brightness / Contrast	300 cd/m <sup>2</sup> (typ) / 1000 :1	
	Response Time	^ 8 ms	
	Viewing Angle (typical)	H. 160° (- 80° ~ + 80°) , V 160°(- 80° ~ + 80°)	
	Light Source	CCFL , Long life, 50,000 hrs (typ)	
<b>Input Sources</b>	PC System	Signal	Analog RGB (0.7/1.0 V <sub>p-p</sub> , 75 ohms)
		Sync	Separate Sync, Composite Sync, Sync On Green
		Frequency	F <sub>H</sub> : 30 - 82Khz , F <sub>V</sub> : 50 -75Hz
	Audio System	2W speaker x 2	
<b>Input Terminals</b>	1 x VGA (15 Pin Female D-Sub), 1 x PC Audio (Stereo Headphone Jack), 1 x DC JACK		
<b>Convenient Features</b>	Auto Calibration , Back Light Adjustment, Plug&Play (VESA DDC/CI, DDC 2B)		
	OSD Multi-Languages , Wall Mount Ready (VESA 200 x 200 mm)		
<b>Power</b>	External AC-to-12VDC power adapter with universal / Auto-Sensing, AC 90 to 260V, 50 / 60 Hz		
<b>Power Consumption</b>	Operation / Power Saving	40 watt, < 5 watt (Support DPMS)	
<b>Operating Condition</b>	Temperature / Humidity	0°C ~ 50°C (32°F ~ 122°F), 10% ~ 90% (no condensation)	
<b>Storage Condition</b>	Temperature / Humidity	- 20°C ~ 60°C (- 4°F ~ 140°F), 10% ~ 90% (no condensation)	
<b>Certification</b>	FCC,CE		
<b>Dimensions</b>	Physical	With Base(W x H x D): TBD	
		Without Base(W x H x D): 512.0 x 416.1 x 80.0 (mm)	
	Carton	W x H x D = TBD	
<b>Weight</b>	N.W. / G.W.	13.4 Kgs/15.4 Kgs	
<b>Container Loaded</b>	20ft / 40ft / 40ft HQ	TBD (Sets , By pallet)	

Options	Touch	Video/TV	Enhanced Panel	Others
	Resistive touch	SV + AV	Panel with LED backlight	Digital Signage(Stand alone)
	Capacitive touch	SV + AV + AV_Looping	High brightness panel	Networking Digital Signage
	SAW touch	SV + AV + TV	Wide Temperature	Motion Sensor
	Infrared touch		Sunlight Readable	Light Sensor
	Protected glass			Auto-Dimming

# Stainless Steel Chassis LCD Monitor

## Mechanical Drawing:



## LCD Options:



### LED Backlight Options

Introducing LED backlight options for monitors for energy efficiency and a brighter screen.



### TouchScreen Options

Our LCD has a wide selection of touchscreen technology to choose which suits for you.

	Four-Wire Resistive	Five-Wire Resistive	Capacitive
PRODUCT SIZE	1.7" - 24"	10.4" - 24"	12" - 24"
TOUCH LIFE	1 - 2 million touches	30 - 35 million touches	100 million touches
SCRATCH RESISTANCE	Hard Coated	Hard Coated	Hard Coated (SiO <sub>2</sub> )
CONTAMINANT RESISTANCE	Resists moisture, dirt, vinegar, ammonia based food products and cleansers	Resists moisture, dirt, vinegar, ammonia based food products and cleansers	Resists moisture, dirt, vinegar, ammonia based food products and cleansers
INPUT METHOD	Finger, Gloved Hand, Stylus	Finger, Gloved Hand, Stylus	Finger
CONTROLLER	USB, RS232	USB, RS232	USB, RS232



### VIDEO Input Options:

For Video inputs options:

DVI, DVI+HDMI, SVideo+AV, SVideo+AV+DVI, AV+Looping, DVI+AV+Looping, HD-SDI, BNC(PAL/NTSC)



### Optical Bonding Options

- Optical Bonding provides the best reduction of ambient light washout of any commercially available enhancement technology.
- Optical Bonding has a lower cost than most other competing technologies.
- Optical Bonding offers superior ruggedization, enhancing the display durability under vibration, shock and other environmental extremes.



### RS-232 Remote Control Options

**Remote Control Protocol: Command Code to set system**



### 9-36V DC Input Options

iTech offers a selection of DC input from 9V to 36V



### Light Sensor and Motion Sensor Options

iTech LCD offers Light and Motion Sensor

### Privacy Filter

Front Glass Options:

- Anti Reflective AR Glass 3mm
- Anti Reflective AR Glass 6mm Vandal-Resistance
- Anti Reflective AR Glass 8mm Vandal-Resistance
- Anti Glare AG Glass 3mm