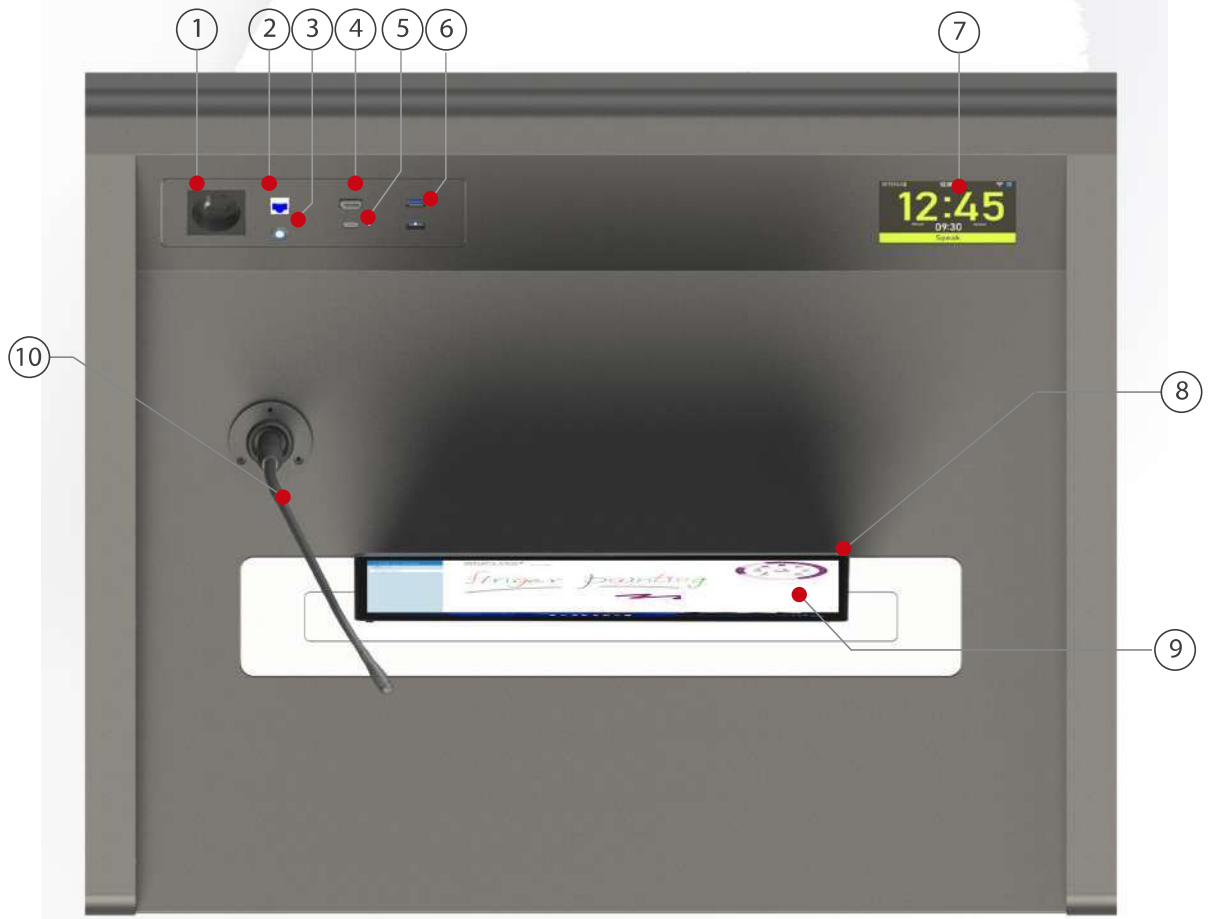


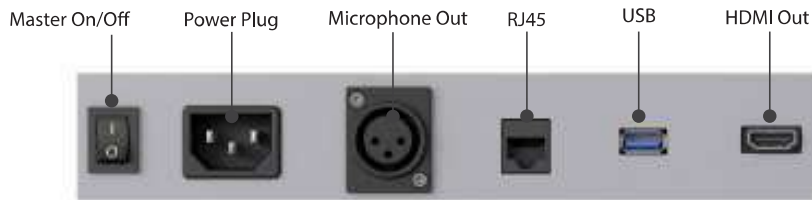
# TM23S

DIGITAL PODIUM





- 1 - Power 110-220V AC
- 2 - RJ45
- 3 - PC On/Off
- 4 - HDMI input
- 5 - USB Type-C
- 6 - USB
- 7 - Clock & Timer
- 8 - 15" Motorized Retractable Multi Touch Screen
- 9 - Creapen Annotation Software
- 10 - 18" Microphones



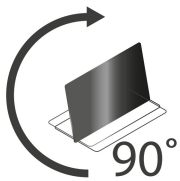
TM23S is designed to meet the basic needs in a conference room. Connecting the existing protector and sound system to TM23S is easy. In case there is not any protector, sound system or network connection. TM23S can satisfy your need as a stand alone product.

## TM23S

	TM23S	TM23S-B
Multi touch speaker screen	15"	-
Front screen - with Embedded Signage Media Player	43"	43"
Player PC : Intel 4, I0 GHz CPU, I20 GB SSD, Windows I0 Pro	✓	-
Microphone	✓	✓
5" Digital Touch Timer	✓	✓
Creapen Annotation Software	✓	-

# Speaker Screen

## ■ 15" Motorized Retractable Multi Touch Screen



### ■ Adjustable Tilt Monitor

Lift design as a advance hidden monitor suitable for audio video systems. Motorized controlling can be executed by press buttons, remote control or RS485 central control. The screen could be rising up from the conference tables automatically to present the workable screen by the lift driving with a best view of 90 degree adjustable angle.

#### TECHNICAL SPECIFICATION

##### • Dimension

Screen Size	15.6"
Screen Thickness	8mm
Panel Size	435*75*3mm
Screen Titling or Rotation Angle	Adjustable Tilt
Touch	PCAP Multi Touch
One-way Running Time	18ms

## ■ Front Screen



Display any content in ultra-high definition with incredibly rich color on slim, efficient signage.

Through intelligent UHD upscaling technology, Samsung's QMR series performs edge restoration and noise reduction to deliver UHD picture quality even with lower resolution content. As an added benefit, the QMR series also features reliable, non-glare panels that provide better visibility from all angles, the QMR series provides reinforced capability with multiple web formats and secured protection.

- Engage customers with lifelike images through ultra high-definition resolution
- Deliver UHD-level picture quality even with lower resolution content through innovative UHD upscaling technology and unique picture-enhancing features
- Dynamic Crystal Color allows viewers to enjoy a wider spectrum of colors, up to one billion shades
- Secure, PC-free operation through Knox and rigid three-layer protection
- Reliable, non-glare panels provide better visibility from all angles,



**Integrated Signage Media Player**  
powered by Samsung MagicInfo S4 Tizen



**Built in Wi-Fi**  
Connect the screen to the CMS wirelessly via the integrated Wi-Fi, ethernet or by LAN

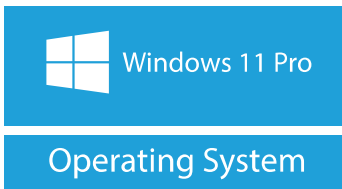
Specifications	
Diagonal Size	43"
Type	Edge LED BLU
Resolution	UHD (3840 x 2160)
Pixel Pitch(mm)	0.2451 x 0.2451
Active Display Area(mm)	941.184 (H) x 529.416 (V)
Brightness(Typ.)	500
Contrast Ratio	4000:1
Viewing Angle(H/V)	178/178
Response Time(G-to-G)	8ms(Typ.)
Display Colors	16.7M
Color Gamut	72%
Operation Hour	24/7
Internal Player (Embedded H/W)	
Processor	Coretex A72 1.7GHz Quad-Core CPU
On-Chip Cache Memory	L1 Instruction Cache : 48KB L1 Data Cache : 32KB L2 Cache : 2MB
Clock Speed	1.7GHz
Main Memory Interface	2.5GB LPDDR4 1.5GHz 64bit
Graphics	Graphic resolution : 1920x1080 Output resolution : 3840x2160 (Scale up from graphic processing result.)
Storage (FDM)	8GB (3.88GB Occupied by O/S, 4.12GB Available)
Multimedia	MPEG-1/2/4, H.263, H.264/AVC, UHD H.264/AVC, VC-1, AVS+, HEVC, JPEG, PNG, VP8, VP9 AC3 (DD), MPEG
IO Ports	USB 2.0
Operating System	Tizen 4.0 (VDLinux)



FRONT



BACK



Specifications	
Operating System	Windows 10 Pro
CPU	Intel® Pentium® Gold G6405 Processor 4.1GHz (4M Cache)
Chipset	Intel B560
Graphics	Integrated - Intel HD Graphics
Memory	DRAM MODULE(DDR4)/3200/4G
Storage	128GB M.2 NVMe™ PCIe® 3.0 SSD
Wireless Data Network	Wi-Fi 6, Bluetooth 5.0, 2*2
LAN	10/100/1000 Mbps, Intel LAN
Side(Front) I/O Ports	4 x USB 3.2 Gen2 Type-A (1 w/QC), 1 x USB 3.2 Gen1 Type-C, 2 x Audio Jacks(optional)
Back I/O Ports	1x USB3.2 Gen1 Type-A, 2x USB2.0, 1x RJ45 LAN, 2x Display Port 1.2, 1x configurable ports (HDMI 2.0/VGA/COM/DP/LAN), 1x Kensington lock, 1x DC-in
Power Supply	150W - 19Vdc, 4.74A, 90W Power Adapter
Dimensions (W x D x H)	175 x 175 x 44.2 mm
Weight	1.3KG (HDD included)
Color	Black
Accessories	USB Keyboard & Mouse
Certificates	BSMI/CB/CE/FCC/UL/CCC/Energy Star/C-Tick/WiFi/RF/VCCI

# Microphone

## ■ Shure 18 CVG18S-B Microphone



Designed with dual gooseneck sections for full articulation, the CVG18 provide scalable, best-in-class performance in a wide variety of locations.

### Features

- Cardioid polar pattern with tailored response for speech
- Dual-section gooseneck enables ease of positioning and placement options
- Included Flange Mount and available snap-fit windscreens (ACVG4WS-B – 4 pack)
- With Mute switch/LED,
- Guards against unwanted RF Interference from portable wireless devices gh resistance to intense nearby radio signals
- Superior Shure design and rugged, dependable construction
- Noise by up to 20 dB.

### Specifications

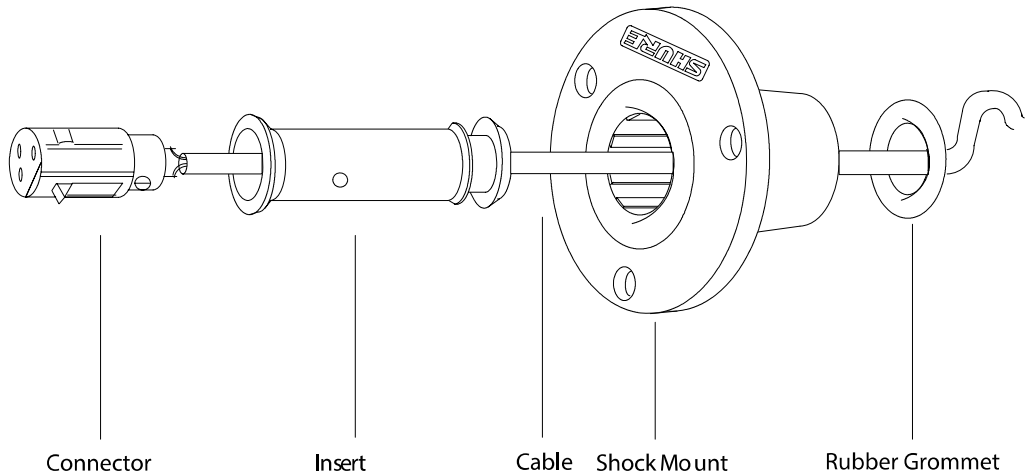
Cartridge Type Electret Condenser	Electret Condenser
Frequency Response	70–16000 Hz
Polar Pattern	Cardioid
Output Impedance	180 $\Omega$
Sensitivity (at 1 kHz , open circuit voltage)	-33 dBV/Pa[1] (22 mV)
Maximum SPL (1 kHz at 1% THD)	120 dB SPL
Signal to Noise Ratio (referenced at 94 dB SPL)	67 dB
Dynamic Range	93 dB
Self Noise (equivalent SPL, A-weighted, typical)	27 dB SPL
Common Mode Rejection (10 Hz to 100 kHz)	45 dB
Preamplifier Output Clipping Level (1% THD)	-7 dBV
Polarity	3
Power Requirements	11–52 V DC[4], 2.0 mA



## ■ Shure A400SMXLR Shock Mount

### Shure A400SMXLR Shock Mount Socket

A400SMXLR Shock Mount decouples a microphone from the mounting surface and reduces transmission of impact or surface

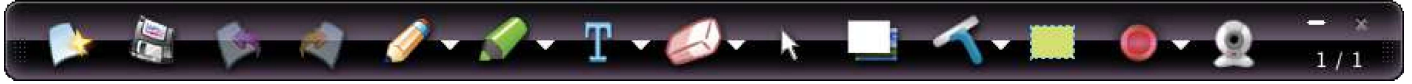


# Application

 CreaPen Software

## Screen Annotation & Screen Recording Solution for Presentations

CreaPen is an extremely simple yet powerful screen annotation and recording software. You can easily write on top of any other application that is currently active on the desktop, even on a running video. You can then save your annotations as an image file or even record the whole session as a video for sharing. It is a useful tool for presenters to communicate and share ideas during a live session, for educators to create effective video tutorials and for salespeople to create impressive video presentations.



Text Input



Whiteboard



Multiple Pages



Screen  
Recording



Screen  
Annotation

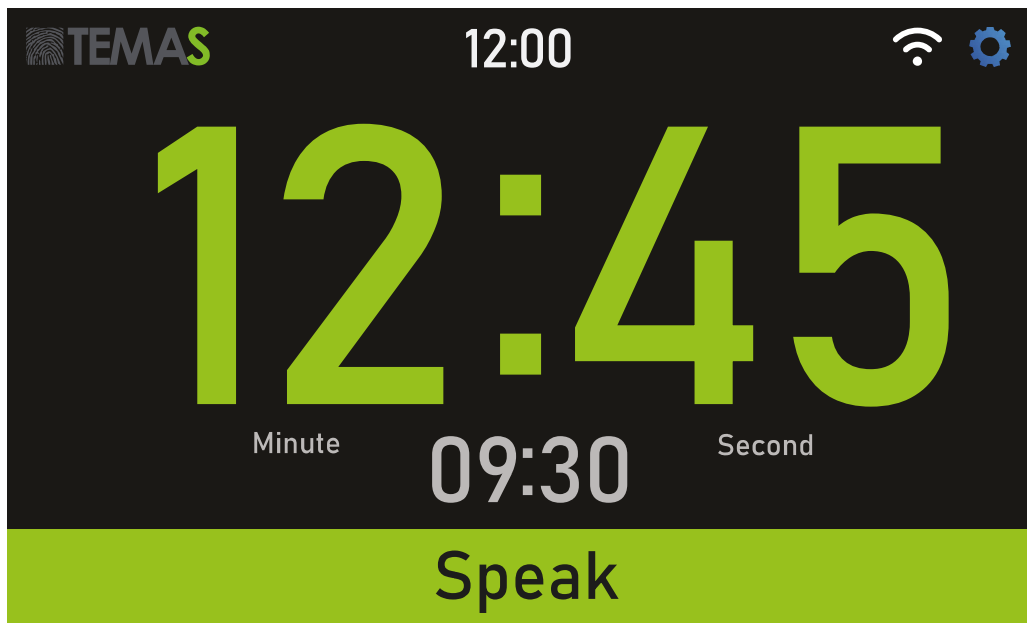


Web Camera



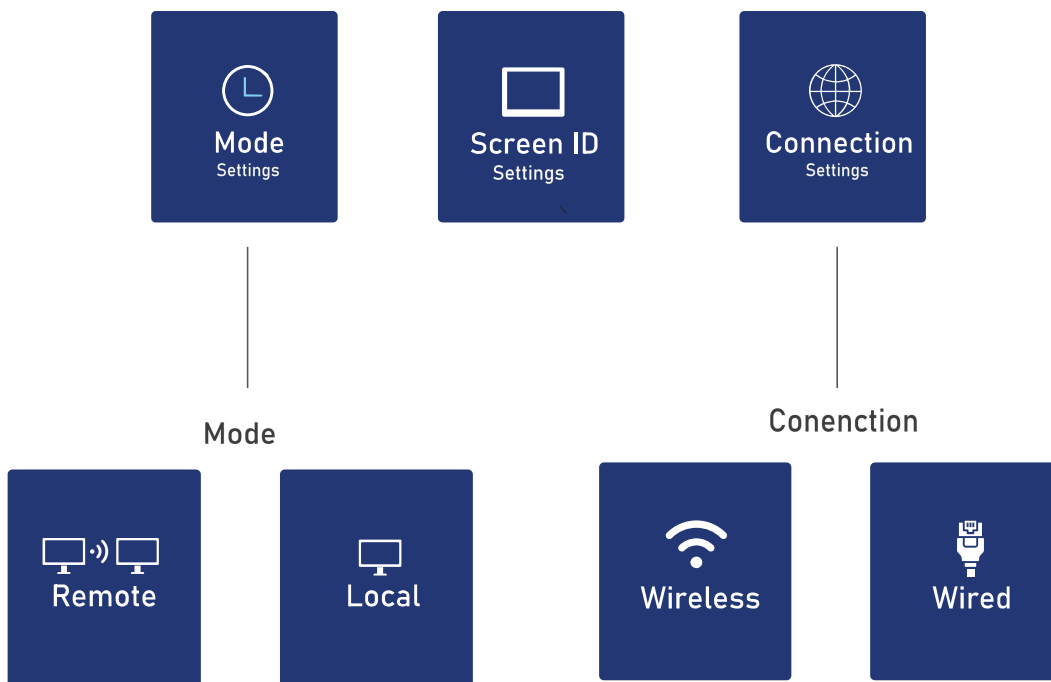
# Application

■ 5" Touch screen Timer & Clock



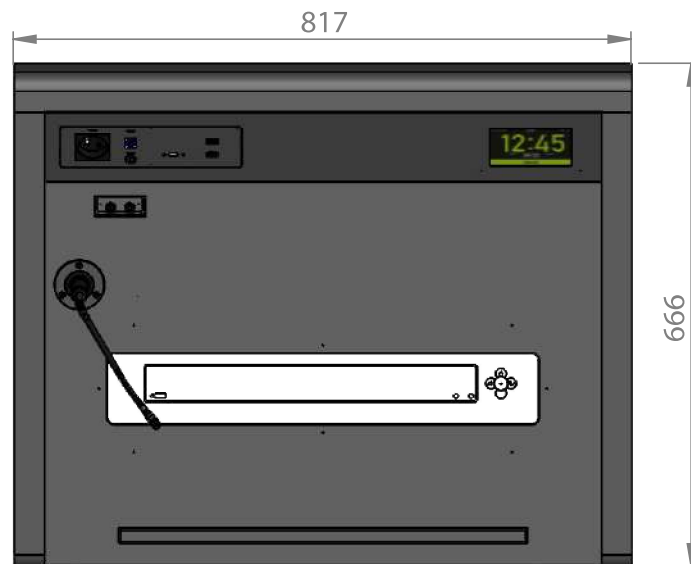
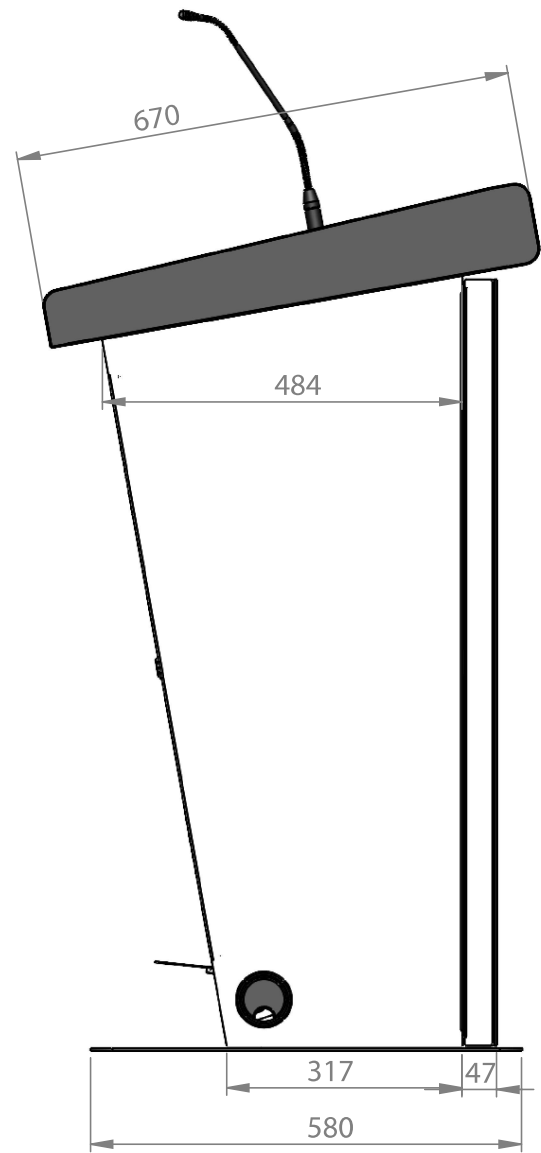
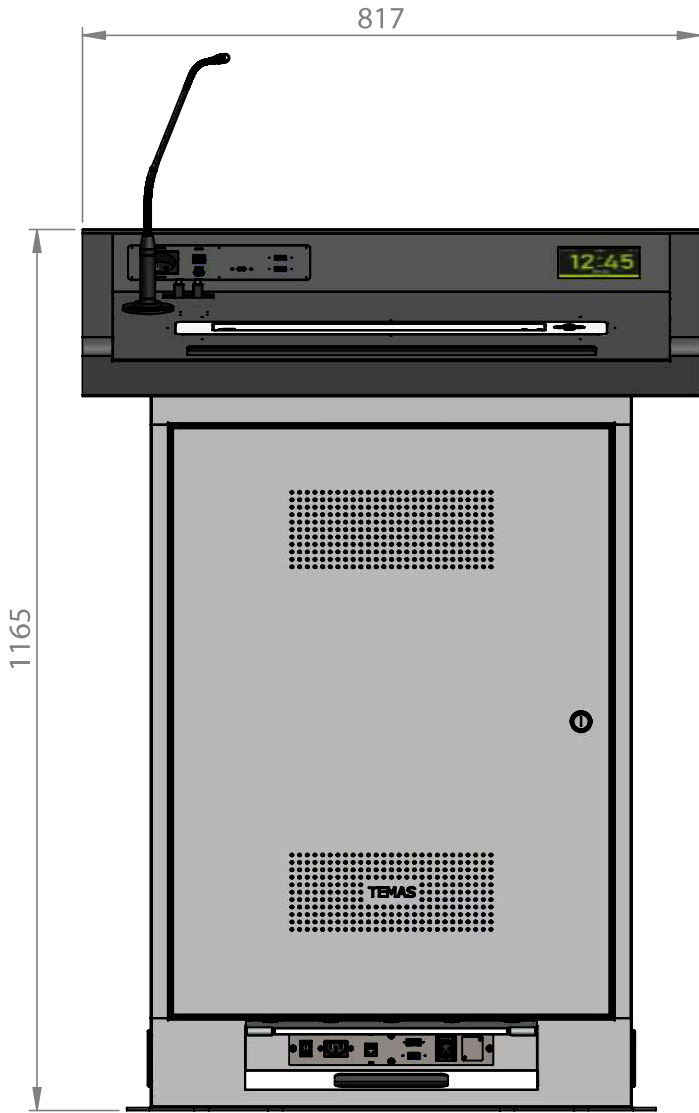
- Speak - Green: 80% of the entire speech
- Sum-up – Orange: The speaker is reminded to end
- End – Red: To remind the speaker to stop talking

## Settings





■ Mechanical Specifications



## ■ Technical specifications

### TM23S

#### ■ Front Panel

Resolution	1920x1080 FHD
Brightness	250 cd/m2
Aspect ratio	16:9
Panel Type	ADS
Built-in Player	Available

#### ■ Lecturer Panel

Screen Specifications	15"
Resolution	1920x1080
Brightness	250 cd/m2
Aspect Ratio	16:9
Touch	PCAP Multi Touch

#### Lecturer Panel PC

CPU	Intel 4,10 GHz
RAM	4 GB DDR4
HDD	120 GB SSD
Operating System	Windows 10 Pro

#### ■ Microphone

Lenght	18"
No of microphone	1 pcs
Output Connector	3-way XLR(Male)
Microphone Type	Cardioid
Frequency Response	50-18 kHz
Power ON Indicator	LED
Power Requirement	Phantom Power (48V)

#### ■ Outputs (Bottom of Podium)

HDMI	Available
Ethernet	RJ45
XLR for microphone	3-way XLR(Male)
USB	USB 2.0

#### ■ Timer

Screen size	5"
Clock	Available
Timer	Avaiable
Stopwatch	Available
Touch	PCAP touch

#### ■ Mechanical Specs

Product dimensions W x D x H	580 x 817 x 1165 mm
Packing dimensions W x D x H	850 x 900 x 1350 mm
Weight(kg)	Set: 68 kg Package: 170 kg