



# Cisco Webex Board Series Technical Decision Maker Presentation

May 2019

# Webex Board

## Designed for the way you work

55-, 70- or 85-inch devices for team collaboration with focus on co-creation.



# 3-in-one collaboration device



## Wireless presentation device

Share your presentations and documents on the Cisco Webex Board's 4K UHD screen.



## Digital whiteboard

Create, draw and whiteboard on a blank canvas or any document. The content is saved instantly in a Cisco Webex Teams space.

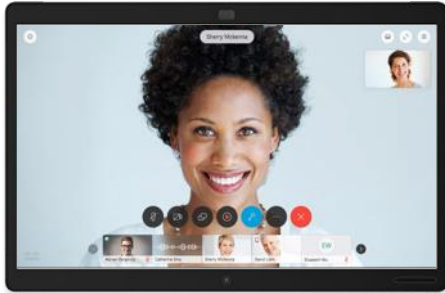


## Conferencing system

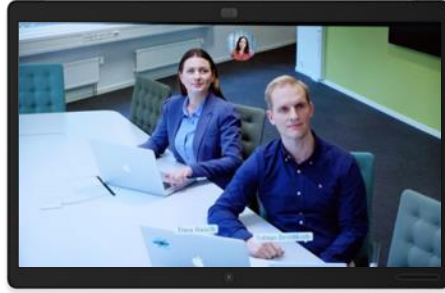
Cisco Webex Board adjusts automatically to participants' position and speaking volume for an ideal meeting experience.

# One device to rule them all.

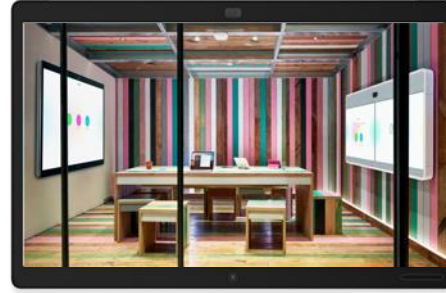
Webex Meetings



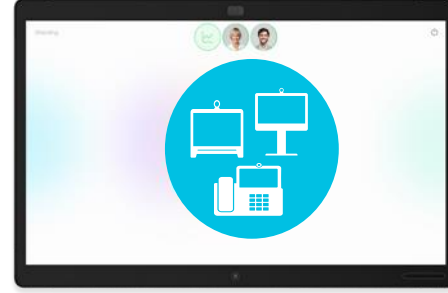
Audio / Video Calling



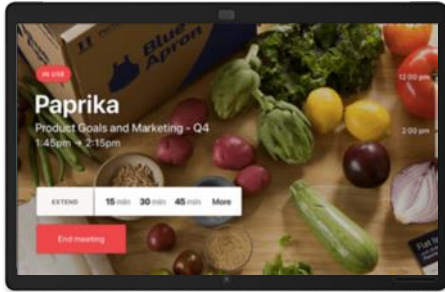
Companion Mode



Board on-premises



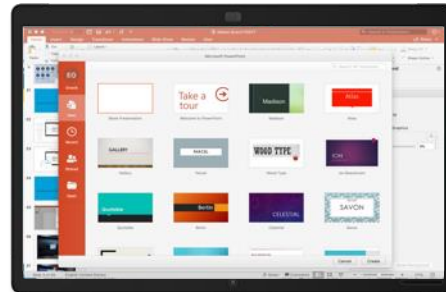
Digital Signage



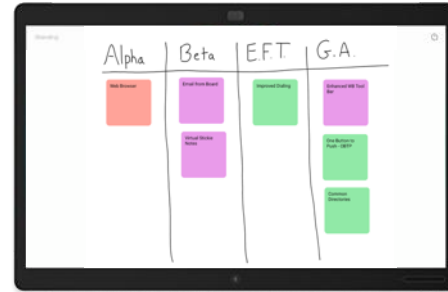
MS Compatible/Touch Re-Direct(\*)



Web apps / integrated apps



Ideation 2.0



# Introducing the Webex Board

- Fully self-contained wireless presentation screen, digital whiteboard, and video conferencing system
- Designed with minimal wires for simplicity and elegance
- High-resolution 4K 55-, 70- or 85-inch screen
- Integrated 4K camera with best overview
- Embedded intelligent microphones
- Wireless sharing and Wi-Fi connectivity
- Proximity. Auto wake-up. Recognizes you
- Easy to install and deploy
- Choose between Webex Cloud or on-Premise deployment
- Touch 10 support
- Touch Re-direct (Board S series only).

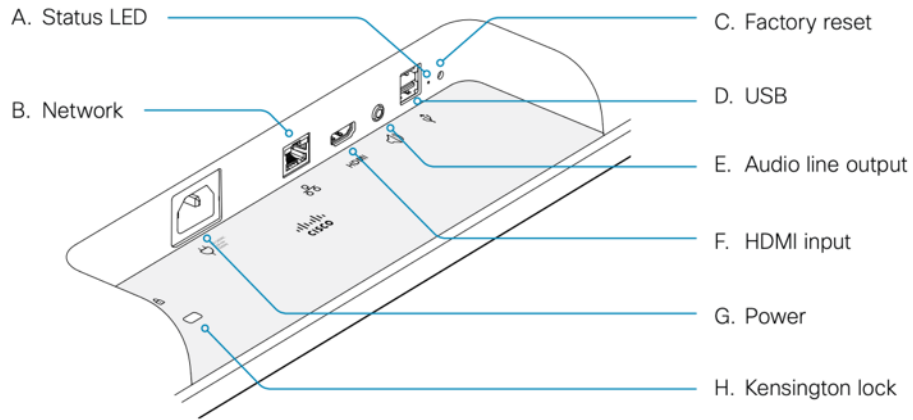


# Minor hardware updates - Board S Series

- Supply chain optimized
- Production moved to a new manufacturer
- S Series changed in PIDs only – no change to product name (i.e., CS-BOARD55S-M-K9)
- Added ultrasound speakers for improved proximity pairing
- Changes to the IO-panel: Replacing the USB-A connector with micro-USB for serviceability and USB-C for touch redirect.
- Minor hardware optimization giving a lower power consumption in standby.
- The design, look and feel will be identical to the previous Board 55 and 70, and users will not notice a difference.
- The new hardware platform is fully compatible with the existing Webex Board mounting options.
- Room OS only. Board OS not supported.

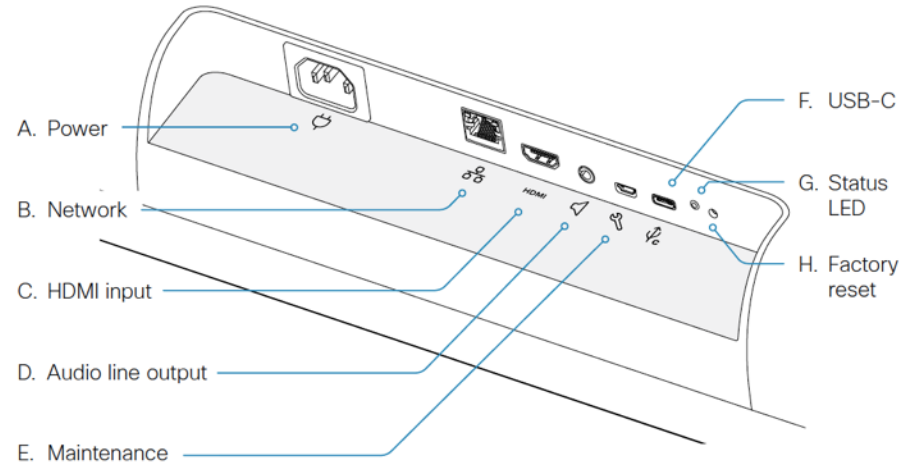
# Webex Board connector panel comparison

«1st edition»



2x USB-A

«S Model»



1x USB-C

# The Cisco Webex Board Family



Cisco Webex  
Board 55

Cisco Webex  
Board 70

Cisco Webex  
Board 85

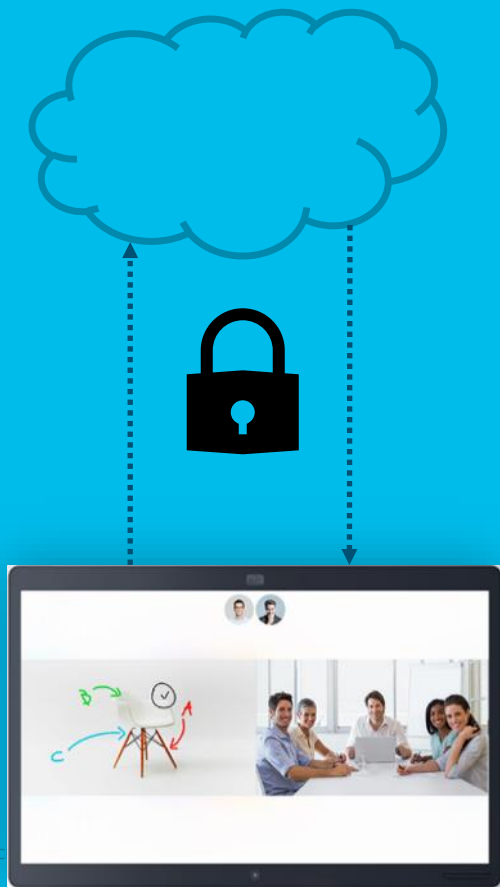


# Board S Series

	55" and 70"	85"
Screen	4K, 16:9 Viewing angle: +- 89 (all directions) Number of colors: 1.07 billion (10 bit) Contrast: 1:4000	
	55" and 70" Edge LED LCD 350 nits Response time: 5,5 ms	85" Direct LED LCD 300 nits Response time: 6,5 ms
Touch	Screen <ul style="list-style-type: none"> <li>• Capacitive touch</li> <li>• Protective glass with optical bonding,</li> <li>• Multi touch</li> </ul> Touch 10 (on-Prem and Cloud. Supported from CE9.8) <ul style="list-style-type: none"> <li>• Network pairing only</li> </ul>	
Camera	Fixed lens, infinite focus F-value: 2.8 4K p60 HFOV: 83 deg VFOV: 55 deg Camera mounted tilted: -25 deg	

	55" and 70"	85"
Audio	12-element mic array (with intelligent beam forming for voice tracking) across top panel Integrated voice optimized speakers	
I/O	HDMI input Home button Digital whiteboarding pen 3.5 mm mini jack audio out (line-out) USB C (for future use. S-series HW only) USB micro (for service)	
Network	Ethernet (RJ-45) 100/1000 Mbit WiFi 802.11 abgn + ac (2.4/5GHz) Bluetooth Ready	
Power	Autosensing power supply 100 to 240 VAC, 50 to 60 Hz	
	Power consumption 55": Standby: 45W Idle or in-use: 185W  Power consumption 70": Standby: 55W Idle or in-use: 240W	Power consumption: Standby: 41 W Idle or in-use: 352 W
Software	Room OS only for S model. Board OS not supported	

# Overview



## Video Inputs:

- 1 HDMI for local presentation or sharing in calls (audio over HDMI)
- Local presentation up to 4Kp@30 (or 1080p60)
- EDID (Extended Display Identification Data)

## Live Video Encode/Decode:

- H.264 when communicating with the Cisco Webex service
- Main video: Up to 1920 x 1080@30
- Presentation sharing: Up to 1920 x 1080@30

## Audio encode/decode:

- Opus when communicating with the Cisco Webex service

## Maximum bandwidth for resolution/frame rate for Cisco Webex cloud registration:

- 720p30 from 768 Kbps
- 1080p30 from 1.72 Mbps

## Optimized for Cisco Webex cloud registration

### End-to-end encryption:

- AES128, AES256, SHA1, SHA256, and RSA. Real-time media is encrypted using the Secure Real-Time Transport Protocol (SRTP)

## On-premises registration with limited feature set

# Intelligent Audio

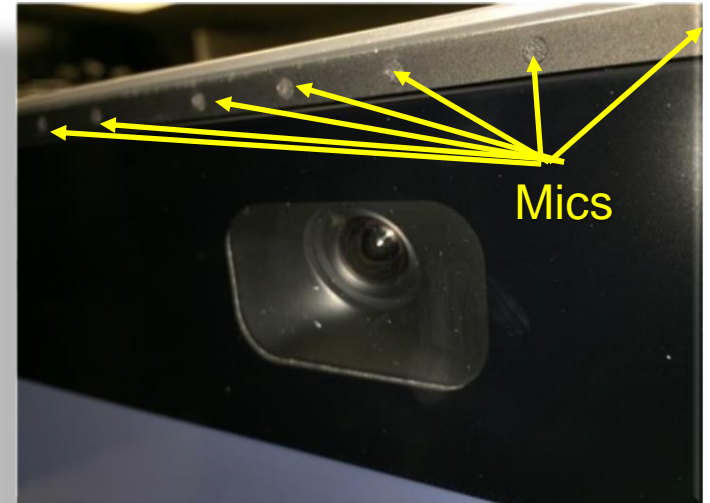
## Microphone array:

Solution allows for flexible deployment scenarios where user-behavior may be unpredictable (e.g., users moving about the room) as compared to standard meeting rooms with table and chairs. A collaboration room should be planned in such a way that participants can freely move within the maximum microphone range of the Webex Board.

- 12 microphone elements
- Used for voice tracking
- Microphone pick-up is focused on the most dominant speaker in the room
- Noise cancellation
- Recommended range in normal office environments: 29 feet / 9 meters

## Speaker system:

Two speakers, bottom-mounted and voice-optimized



# Beam-forming microphone

- 12-element microphone array improves sound to far-end.
- Clearer and "closer" sound produced by removing reverb and reflections.
- Uses spatial information to get direction and intelligently focus pick-up on the sound source

Operation: Room is logically divided into sectors (see figure on the right) or "beams."

Beam selection: Identify sector/"beam" with lowest DRR (Direct to Reverb Ratio) and SNR (Signal to Noise Ratio).

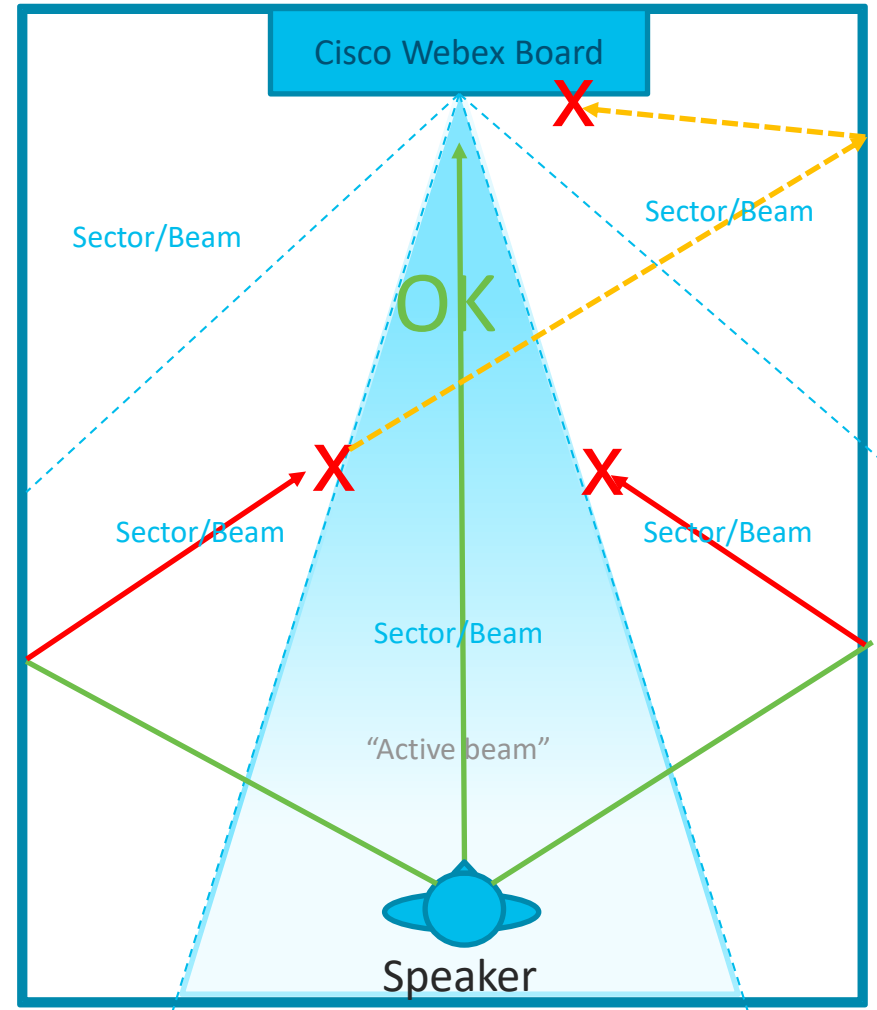
## Benefits:

By using a beam-forming microphone, we can:

- Remove early reflections in the room (red arrow)
- Attenuate spatial noise (sound/noise outside the sector)
- Remove room reverb (late reflections (orange arrow) – largest contributor to muffled and distant sound)

## Result:

Audio is improved because only direct sound (green arrow) is sent to far-end participants, while reverb (red arrow) is filtered out.



# Cisco Webex Board Pen

- Passive, no batteries required
- Three pens ship with each unit
- White boarding can also be done with just your finger



Pen stored on Cisco Webex Board magnetically.



Pen holder located at bottom right corner of Cisco Webex Board.

# Webex Board Installation

# Considerations

The Cisco Webex Board's all-in-one form factor with touch screen, wide angle camera, and intelligent microphone array allow for flexibility in deployment. It supports a wide range of scenarios where user behaviour is less predictable (e.g., users might move about the room) than in traditional meeting rooms with table and chairs.



# Considerations

To ensure the best possible user experience, start your planning by looking at the room set-up with the following in mind:

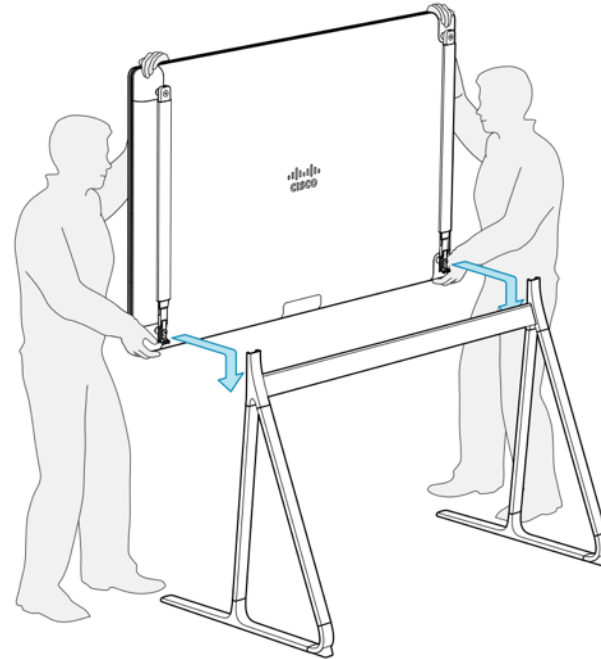
- Screen size: Recommended room size
  - 55: 2 – 6 people
  - 70: 2 – 8 people
  - 85: 2 – 12 people
- Microphone array: Max recommended range 9 m / 29 feet in normal office environments



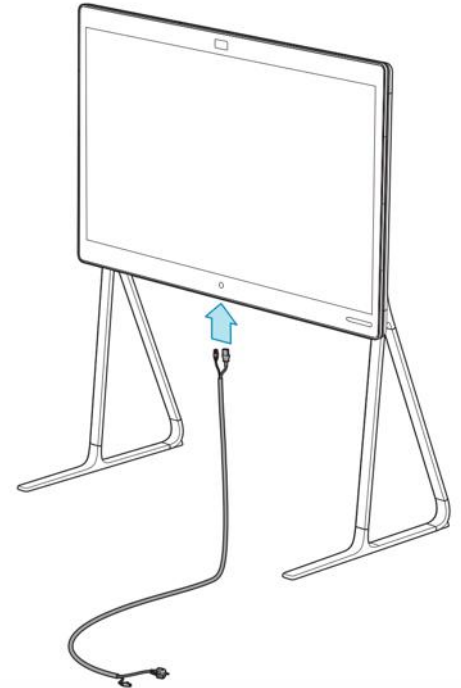


# Easy installation

## Step-by-step installation guide



## Two cables: Power and network



# Installation flexibility



Wall mount kit



Wall stand



Floor stand

# Simple Transport and Assembly



Webex Board 85 ships in a transportation frame with wheels for simple transport and installation.



Can be rolled on the corner for maneuverability. Freight elevator not needed. Wheels on three sides.



Frame is used for lifting during installation.

# Webex Board Touch 10 Support

- Supported on cloud and on-prem Boards (from CE9.8)
- Only network pairing supported (No RJ-45 for direct Touch 10 connection).
- Basic calling features on Board GUI
- All Board specific features (whiteboard, annotation and open space/open file) are only available directly on the Board GUI
- Advanced calling features for on-prem is accessed on Touch10
  - Webex Board will behave as a standard Room System (SIP device)
  - On-Prem Webex Board will have similar feature set to the Room systems



Purpose built for easy and intuitive



Conference control



Search contacts



Show content



Camera control



10" capacitive touch screen



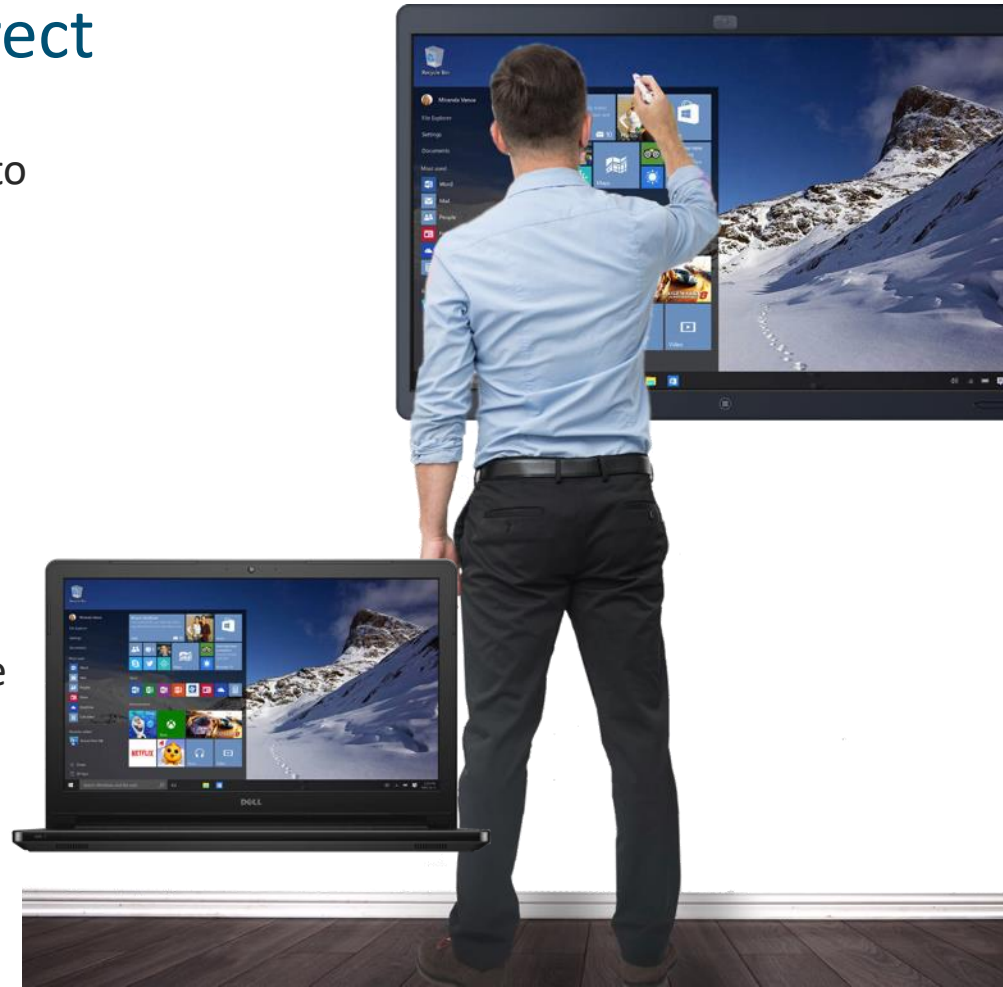
Mute button



Volume control

# Webex Board Touch Re-Direct

- Use the Webex Board as a touch screen to control supported laptops (like Windows 10 PC).
- Interact with the apps on your device directly from the Board.
- Supported on both on-Prem and Cloud registration.
- Only supported on Board S series via the USB-C connector.



# Webex Board On Premise

# Webex Board on-Prem

- Support for CUCM, VCS, TMS and MRA  
Board support in CUCM versions 10.5, 11.5, 12.0 and 12.5  
TMS version 15.9 and newer
- Support all on-prem calling features  
On-premise Boards will work and behave like standard SIP  
Video Endpoints.
- Local Whiteboarding  
Local whiteboarding only(\*). Whiteboards can be shared as  
PDF using e-mail.

(\* ) Whiteboarding is local only, outside of a call.



# Webex Board on-Prem – Features

Feature	On Board GUI	Touch 10 only	Not supported
Local multisite		X	
Hold/Resume		X	
Transfer		X	
Shared Lines		X	
Local Layout Selection			X
CMS Layout Selection		X	
ISDN Dialing		X	
In-Room Controls	X	X	
Digital Signage			X



# Webex Board on-Prem – Features

Feature	On Board GUI	Touch 10 only	Not supported
Minimize Remote Presentation			X
Local Preview of Presentation – In Call			X
Ad-Hoc Conferencing		X	
Camera Control			X
Far-End Camera Control		X	
Multiple local Whiteboarding and annotation sessions – Not in Call	X		
Send Multiple Whiteboards/Annotations to e-Mail	X		
Companion Mode			X

# Webex Board on-Prem

- **Management**

SW updates managed in the same way as pre-registered video devices.

Device management APIs provided are the same as pre-registered video devices

- **Calling**

SIP, OBTP, Content sharing, ad-hoc calling and dialing experience as with on-prem systems.

On-prem proximity app call controls.

- **Wireless Sharing (excl. Whiteboarding)**

Wireless pairing & sharing using on-prem proximity.

Proximity pairing/sharing with Meetings app & Teams app.

- **Whiteboarding (only outside of call)**

Local whiteboard & annotation.

Save to email.



Stickies



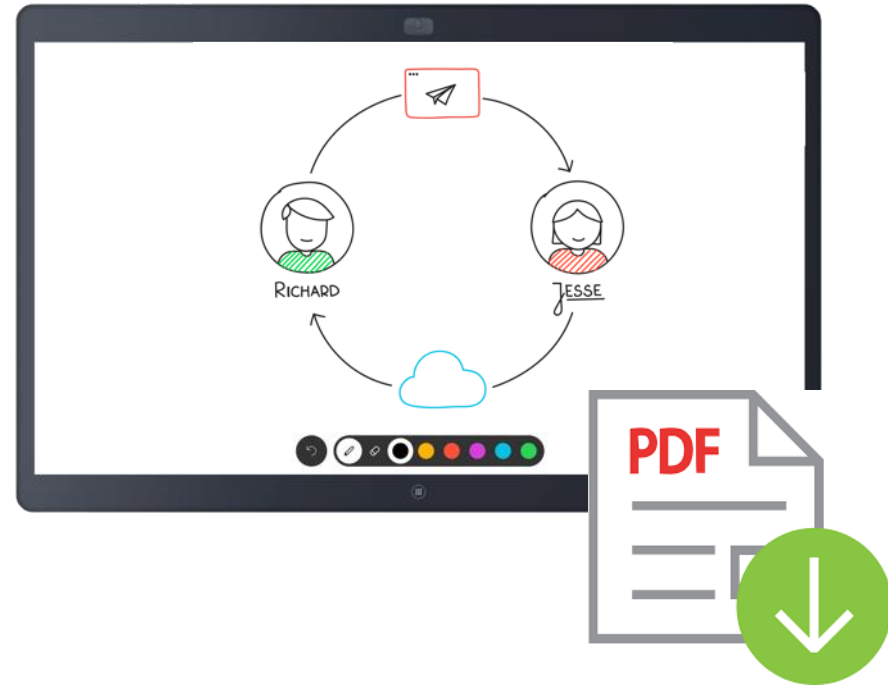
Extended canvas



Email as PDF

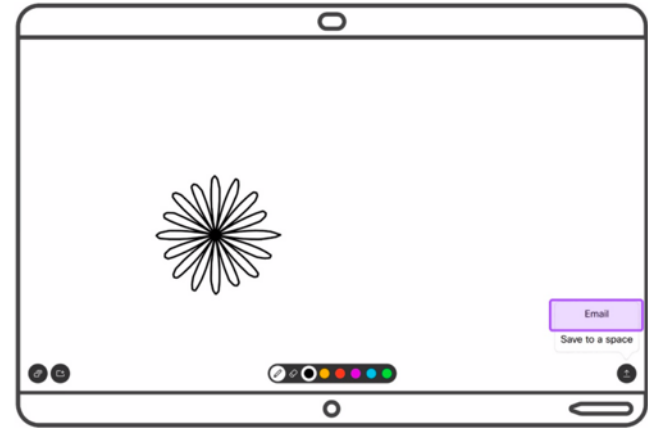
# Save Whiteboard to Email

- Save whiteboards by sending them as PDF to an email address, when Board is registered on-Prem or you are working with someone that is not using Teams.
- Enable customers not yet ready for Teams deployments with the ability to save work from Webex Boards in a digital format.
- Whiteboarding not available in call.
- Whiteboards are sent as static PDF. Continued working not possible.



# Save Whiteboard to Email

- Working SMTP server for sending outbound email required (We have tested using Gmail and Office365).
- Wizard for SMTP setup and verification on Board's web interface.



The screenshot shows the Cisco Board web interface. At the top is the Cisco logo. Below it is a navigation bar with the following tabs: Home, Call Control, Setup (which is highlighted), Security, Maintenance, and Integration. The main content area is titled 'Send Whiteboard to Email'. Below the title, there is a paragraph of text: 'This feature allows users to share whiteboards and annotations created on this collaboration device via email. No existing email configuration detected. Configure a connection to an SMTP server to start using this feature.' At the bottom of the content area, there are two buttons: 'Start Wizard...' (highlighted in blue) and 'Manual Configuration' (grey).

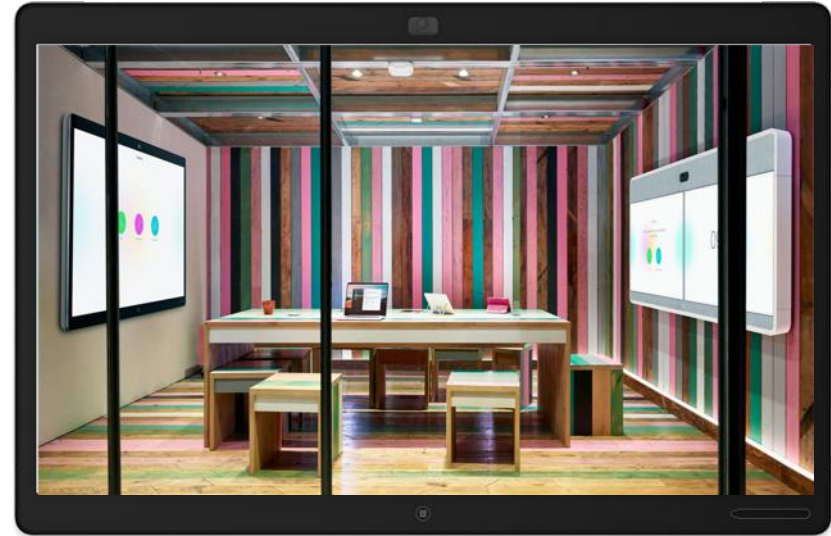


# Webex Board in Companion Mode

# Companion Mode

## - A Webex Room System and a Webex Board in the same physical space

- Main video and all audio will be on the Room device. Speakers and Microphones.
- Room device behaviour is unaffected by companion mode.
- Both Board and Room device will join the meeting automatically (through OBTP, starting meeting in app, etc)
- Board used for whiteboarding and presentation only.
- Local whiteboard sessions on Board outside of call is shown on Room system.
- Presentations and whiteboards are shown on Room system and Board simultaneously.
- Configured in Control Hub
- Supported Room systems (only NVIDIA based systems):
- Room 55, 55D, 70S, 70D, 70S G2, 70D G2
- Room Kit Mini, Kit, Kit Plus and Kit Pro



# Companion Mode - Configuration

Companion mode is easily configured in Control Hub:  
Add Webex Board to an existing place with a supported room system.

The screenshot displays the Cisco Webex Control Hub interface. On the left is a dark sidebar with navigation options: Overview, Users, Places (highlighted), Services, Devices, Analytics, Troubleshooting, and UC Demo Lab. At the bottom of the sidebar is the user profile for Tobias Brodtkorb, Full Admin, User, We... The main content area is titled 'Places' and features a search bar with the text 'tme oslo comp' and a search icon. Below the search bar, there is a table with columns 'Name' and 'Contains'. A single row is highlighted in blue, showing 'TME Oslo Companion' under 'Name' and 'Cisco Webex Room 55, Cisco Webex Board 85S' under 'Contains'. To the right of the table is a detailed view for the selected place, 'TME Oslo Companion'. This view includes a location icon, the place name, and an 'Edit' button. Below this, there are sections for 'Services' (with 'Calling' and 'Free Calling' options) and 'Devices' (with an 'Add Device' button). Under the 'Devices' section, two items are listed: 'Cisco Webex Room 55' and 'Cisco Webex Board 85S', each with a right-pointing chevron. At the bottom of the detailed view is a 'Device Settings' section. A red L-shaped arrow originates from the highlighted table row and points to the 'Cisco Webex Board 85S' device entry in the detailed view.

**Cisco Webex Control Hub**

Overview  
Users  
**Places**  
Services  
Devices  
Analytics  
Troubleshooting  
UC Demo Lab

Tobias Brodtkorb  
Full Admin, User, We...

Places

Search: tme oslo comp

All 1 With Devices 1

Name	Contains
TME Oslo Companion	Cisco Webex Room 55, Cisco Webex Board 85S

**TME Oslo Companion** [Edit]

Place

Services [Edit](#)

Calling Free Calling >

Devices [Add Device](#)

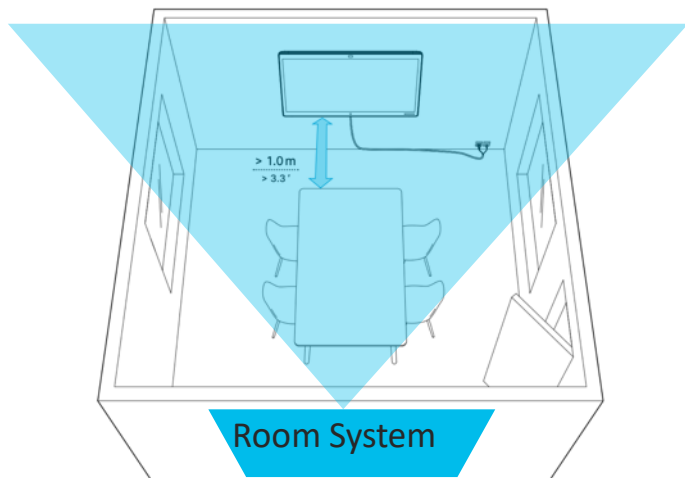
- Cisco Webex Room 55 >
- Cisco Webex Board 85S >

Device Settings

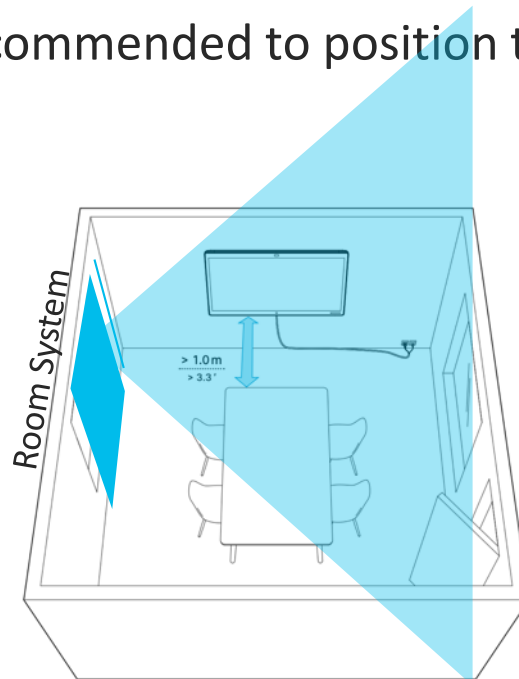
# Companion Mode - Setup

Companion Mode can be setup in multiple configurations.

For best local- and remote user experience it is recommended to position the Board in the Room system's field of view:



or



Directly opposite

At a 90 degree angle



# Webex Board Configuration

# Cisco Webex Board 55 configuration and spares for S series

Product Name	Product Number
Cisco Webex Board 55: Upfront pricing (GPL)	CS-BOARD55S-G-K9
Cisco Webex Board 55 – Wall mount kit upfront pricing (GPL)	CS-BOARD55-G-WMK
Cisco Webex Board 55 – Floor stand upfront pricing (GPL)	CS-BOARD55-G-FS
Cisco Webex Board 55 – Wall stand upfront pricing (GPL)	CS-BOARD55-G-WS

Spare Product Name	Spare Product Number
Cisco Webex Board 55 – Spare unit	CS-BOARD55S=
Cisco Webex Board 55 – Wall mount kit – spare	CS-BOARD55-WMK=
Cisco Webex Board 55 – Floor stand – spare	CS-BOARD55-FS=
Cisco Webex Board 55 – Wall stand – spare	CS-BOARD55-WS=
Cisco Webex Board Pen kit (2 pens and 6 extra tips)	CS-BRD-PENKIT=
Cisco HDMI presentation cable 8m – 4K capable (w/repeater)	CAB-PRES-2HDMI-GR=
Cisco Webex Board, cable management kit (sleeve only) - spare	SPBOARD-CBLMGMT=

# Cisco Webex Board 70 configuration and spares for S series

Product Name	Product Number
Cisco Webex Board 70: Upfront pricing (GPL)	CS-BOARD70S-G-K9
Cisco Webex Board 70 – Wall mount kit upfront pricing (GPL)	CS-BOARD70-G-WMK
Cisco Webex Board 70 – Floor stand upfront pricing (GPL)	CS-BOARD70-G-FS
Cisco Webex Board 70 – Wall stand upfront pricing (GPL)	CS-BOARD70-G-WS

Spare Product Name	Spare Product Number
Cisco Webex Board 70 – Spare unit	CS-BOARD70S=
Cisco Webex Board 70 – Wall mount kit – spare	CS-BOARD70-WMK=
Cisco Webex Board 70 – Floor stand – spare	CS-BOARD70-FS=
Cisco Webex Board 70 – Wall stand – spare	CS-BOARD70-WS=
Cisco Webex Board Pen kit (2 pens and 6 extra tips)	CS-BRD-PENKIT=
Cisco HDMI presentation cable 8m – 4K capable (w/repeater)	CAB-PRES-2HDMI-GR=
Cisco Webex Board, cable management kit (sleeve only) - spare	SPBOARD-CBLMGMT=

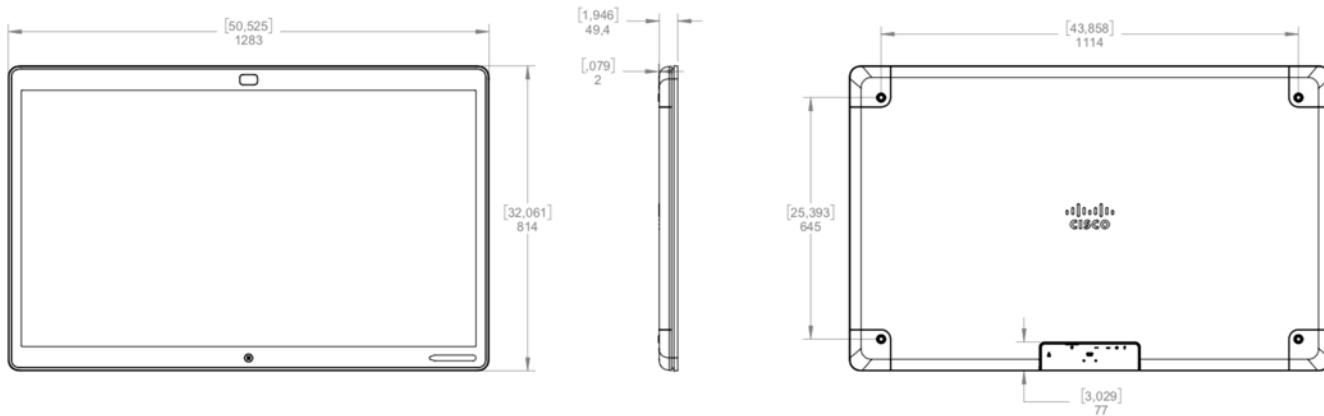
# Cisco Webex Board 85 configuration and spares for S series

Product Name	Product Number
Cisco Webex Board 85: Upfront pricing (GPL)	CS-BOARD85S-G-K9
Cisco Webex Board 85 – Wall mount kit upfront pricing (GPL)	CS-BOARD85-G-WMK
Cisco Webex Board 85 – Floor stand upfront pricing (GPL)	CS-BOARD85-G-FS
Cisco Webex Board 85 – Wall stand upfront pricing (GPL)	CS-BOARD85-G-WS

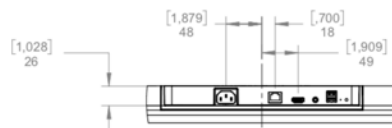
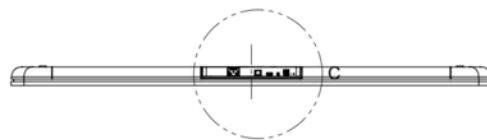
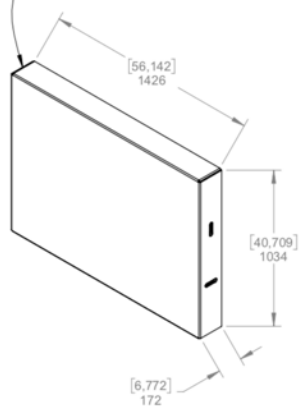
Spare Product Name	Spare Product Number
Cisco Webex Board 85 – Spare unit	CS-BOARD85S=
Cisco Webex Board 85 – Wall mount kit – spare	CS-BOARD85-WMK=
Cisco Webex Board 85 – Floor stand – spare	CS-BOARD85-FS=
Cisco Webex Board 85 – Wall stand – spare	CS-BOARD85-WS=
Cisco Webex Board Pen kit (2 pens and 6 extra tips)	CS-BRD-PENKIT=
Cisco Webex Board 85 transport frame - spare	CS-BRD85-FRM=
Cisco USB-C – USB-C cable, 4 meters	CAB-USBC-4M-GR=

# Appendix

# Cisco Webex Board 55 Dimensions and Weight



Weight of Main Unit including Packaging = 45.6 Kg [101lb]



DETAIL C  
SCALE 1 : 5



Sheet 1 of 4

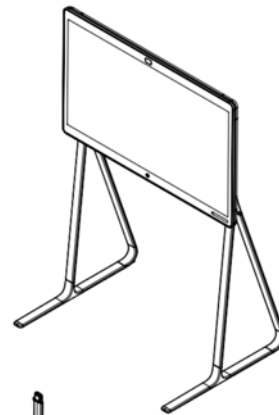
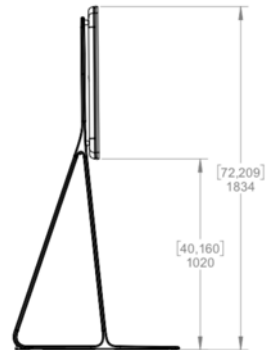
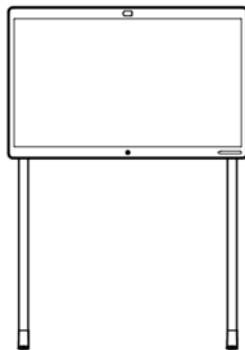
European projection



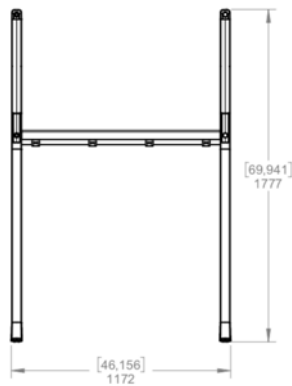
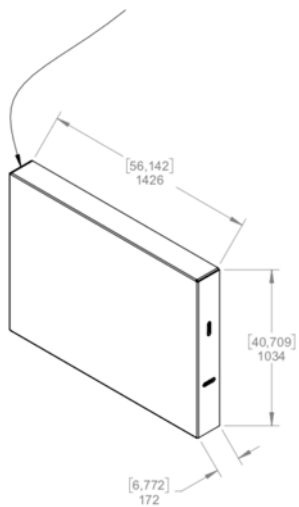
Unit: mm

Sheet size: A3

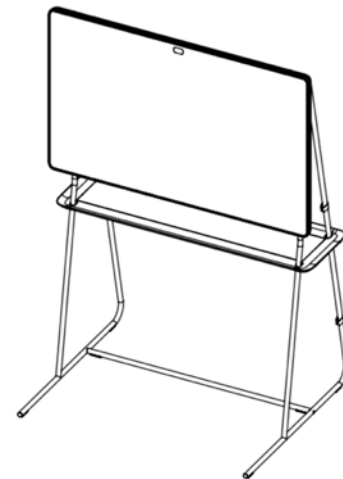
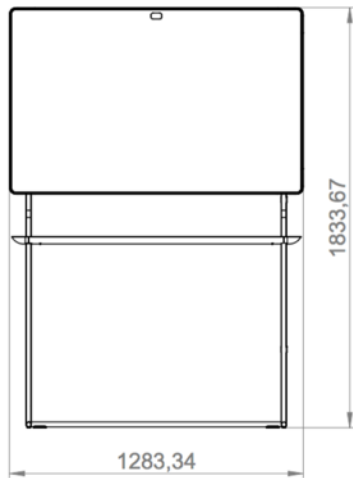
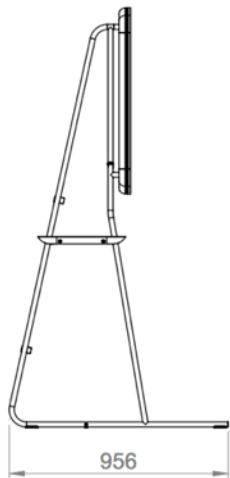
Scale: 1:10



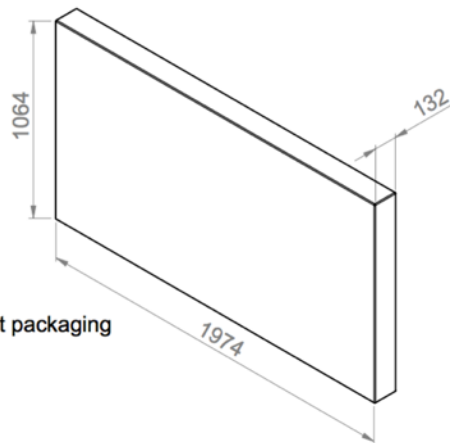
Weight of floor stand including packaging = 21.9 kg (48.3 lbs)  
Total weight including Webex Board: 61.9 kg (136.5 lbs)



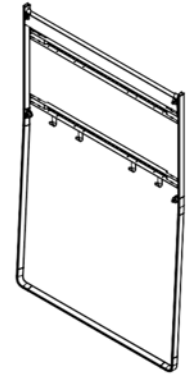
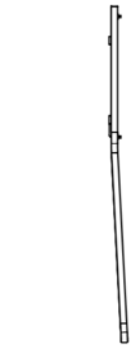
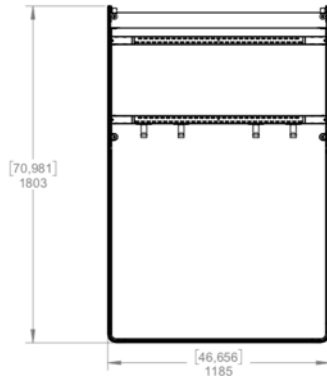
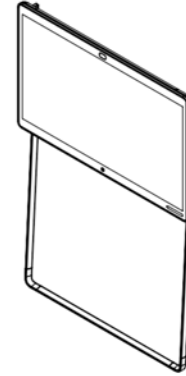
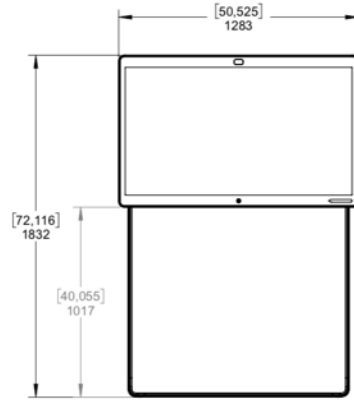




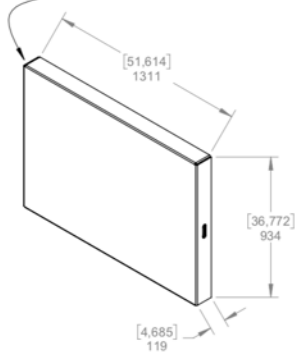
Weight of floor stand: 21.1 kg (46.4 lbs)  
Total weight including Webex Board: 60.9 kg (134.2 lbs)



Floor Stand Kit packaging  
Weight: 25 Kg

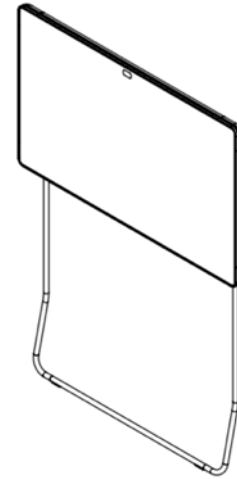
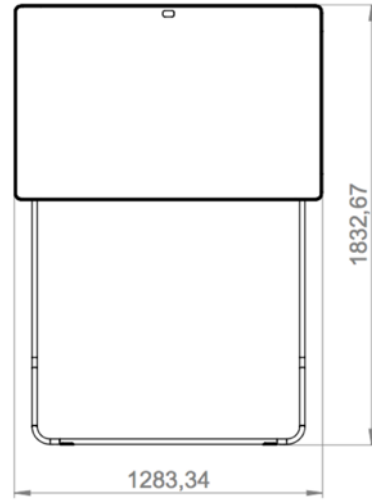
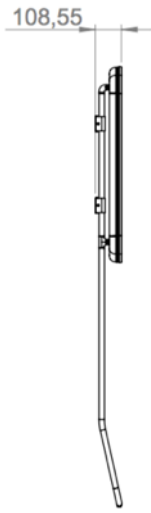


Weight of Wall Stand including Packaging = 14 Kg [30.8 lb]  
Total weight including Spark Board: 51 Kg [112.4 lb]

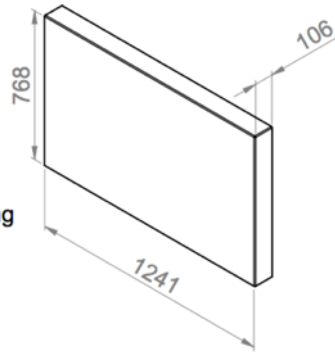


Weight of wall stand including packaging = 14 kg (30.8 lbs)  
Total weight including Webex Board: 51 kg (112.4 lbs)

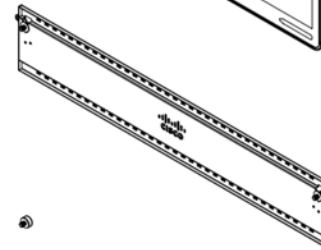
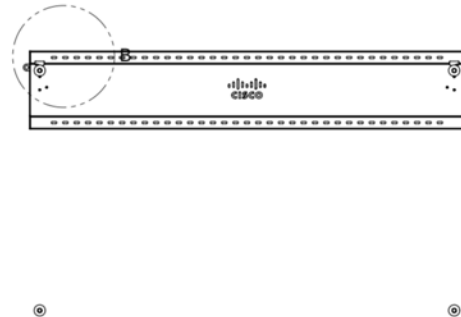
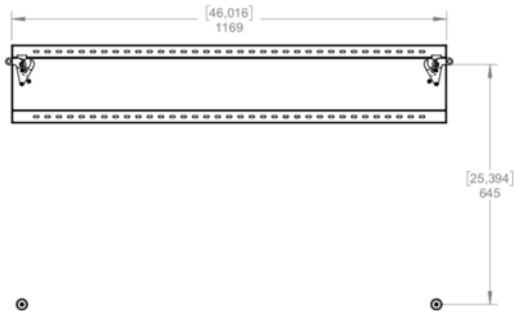
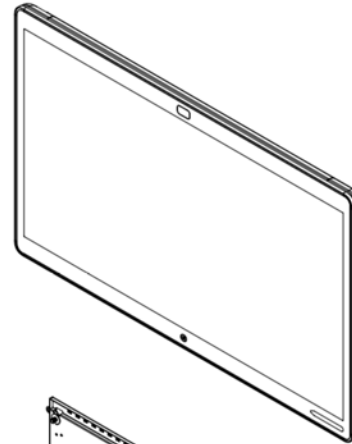
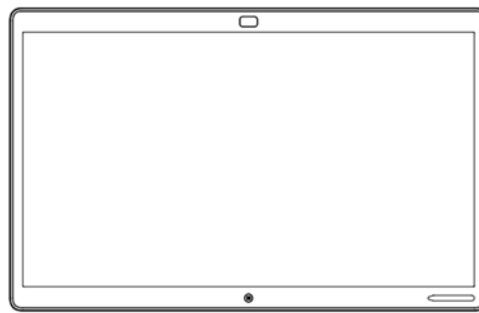
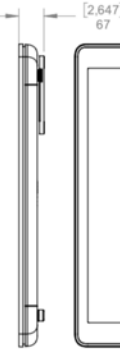
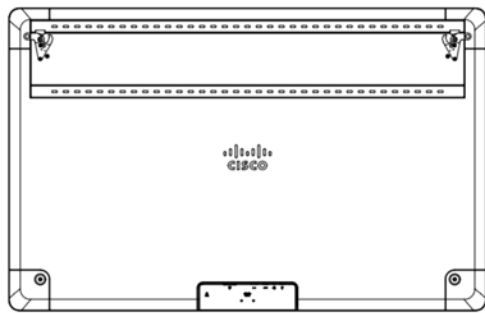




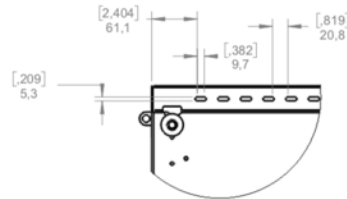
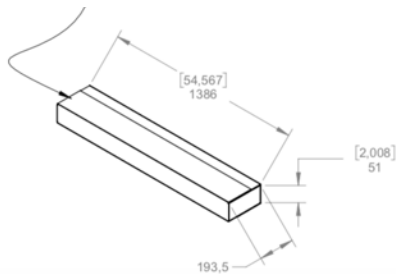
Wall Stand Kit packaging  
Weight: 13 Kg



Old wall stand

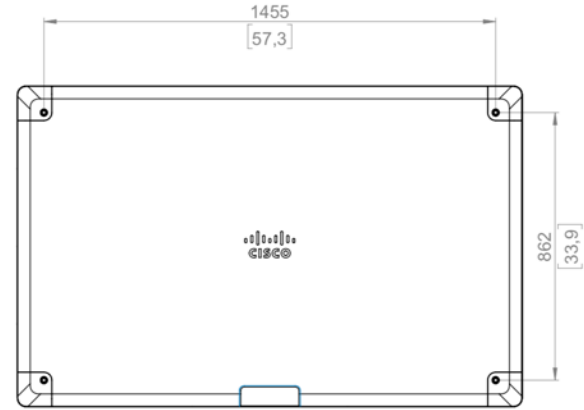
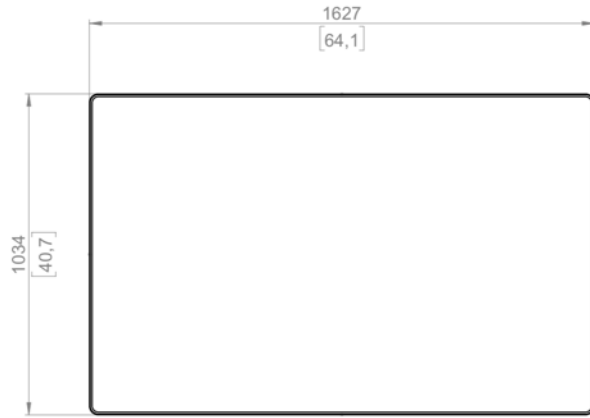


Weight of wall mount including packaging = 6 kg (13.2 lbs)  
 Total weight including Webex Board: 48.8 kg (98.7 lbs)

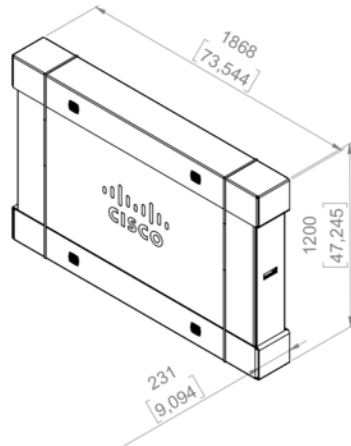


DETAIL B  
 SCALE 1 : 5

# Cisco Webex Board 70 Dimensions and Weight

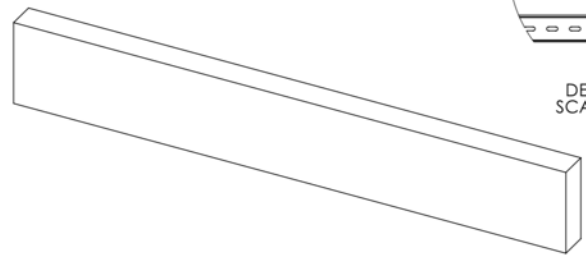
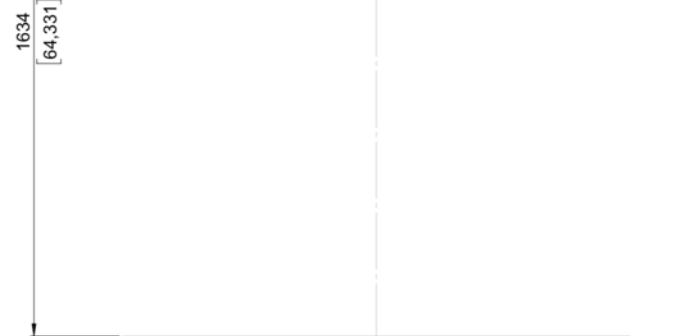
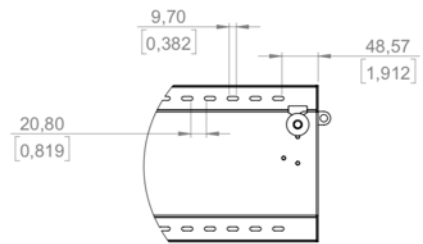
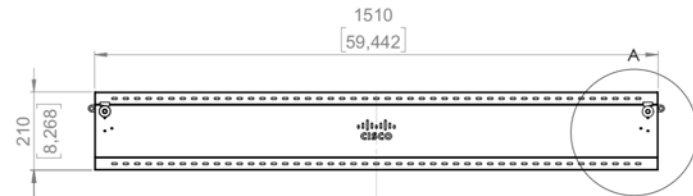


Webex Board weight: 64.3 kg (141.8 lbs)  
 Weight including packaging and accessories: 72.3 kg (159.4 lbs)



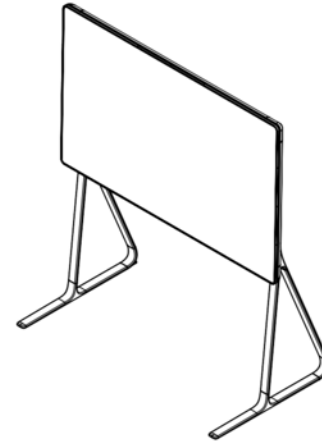
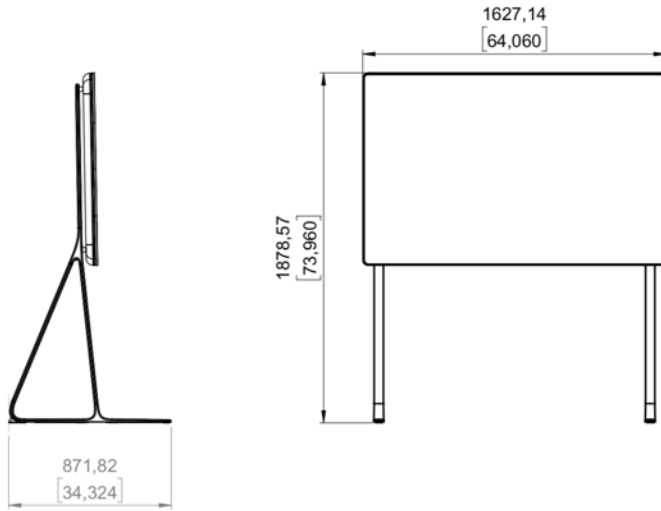
	European projection	
	Unit:	mm (in.)
	Sheet size:	A3
	Scale:	1:12

12  
[0,465]      79  
[3,1]

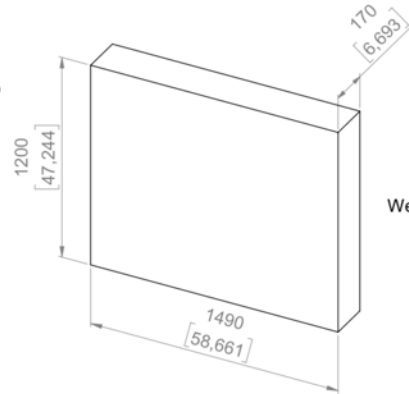


DETAIL A  
SCALE 1 : 5

	European projection
	Unit: mm (in.)
	Sheet size: A3
	Scale: 1:10



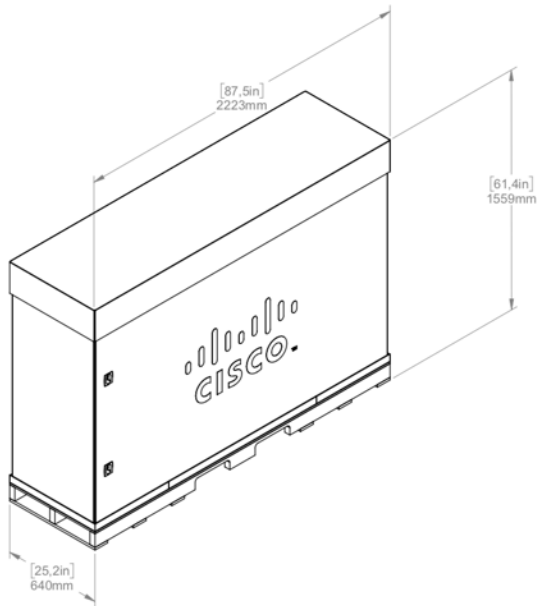
Weight of floor stand: 17.8 kg (39.2 lbs)  
 Total weight including Webex Board: 82.1 kg (181 lbs)



Weight including packaging: 22 Kg

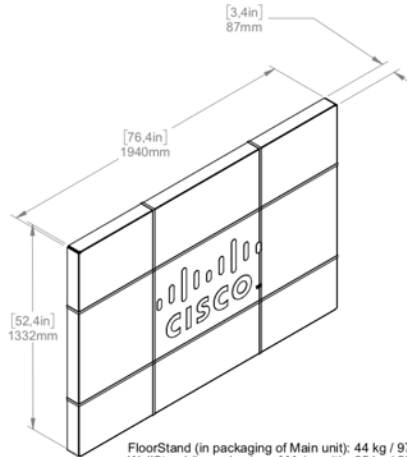


# Cisco Webex Board 85 Dimensions and Weight



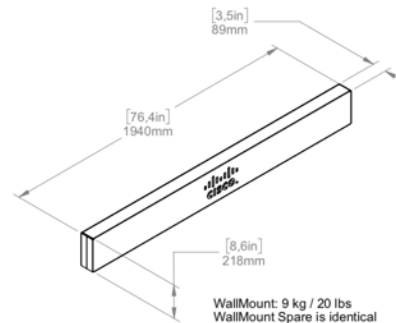
Packaging for Main Unit.  
All mounting options goes within.

Main Unit: 188 kg / 414 lbs  
 With FloorStand: 233 kg / 514 lbs  
 With WallStand: 213 kg / 470 lbs  
 With WallMount: 199 kg / 439 lbs

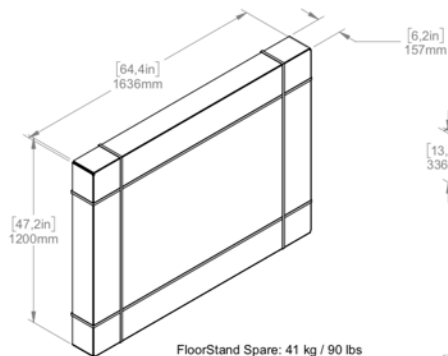


FloorStand (in packaging of Main unit): 44 kg / 97 lbs  
 WallStand (in packaging of Main unit): 25 kg / 55 lbs

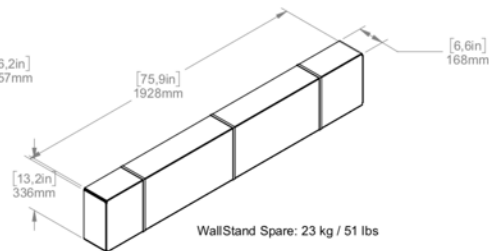
Please note: These are for shipping with Main unit ONLY.



WallMount: 9 kg / 20 lbs  
 WallMount Spare is identical



FloorStand Spare: 41 kg / 90 lbs



WallStand Spare: 23 kg / 51 lbs

## Webex Board 85S

### Dimensions and Weights for Transport

Sheet 1 of 6

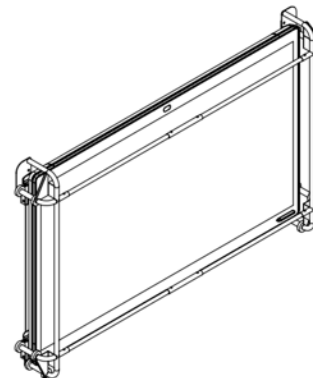
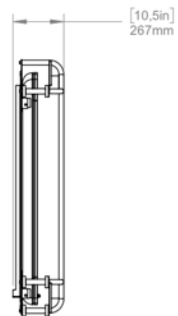
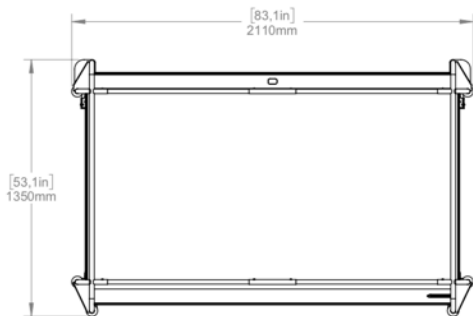
European projection



Unit:

Sheet size:

Scale:



Total weight, Main unit and Transport-frame: 115 kg / 254 lbs

## Webex Board 85S

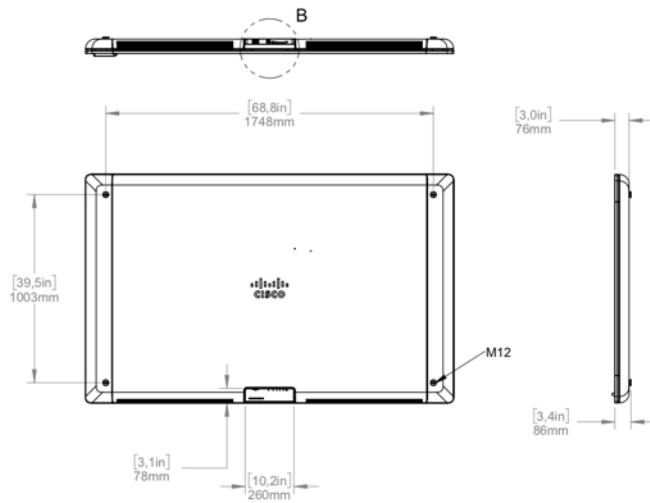
### Main Unit in Transport frame

Sheet 3 of 6

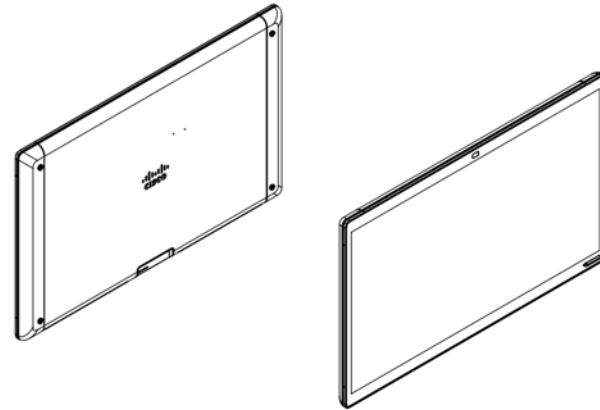
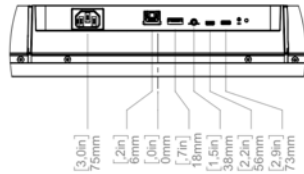
European projection



Unit: mm  
Sheet size: A3  
Scale: 1:20



DETAIL B  
SCALE 1 : 4



Total weight: 100 kg / 220 lbs

Webex Board 85S

Main Unit

Sheet 2 of 6

European  
projection



Unit:

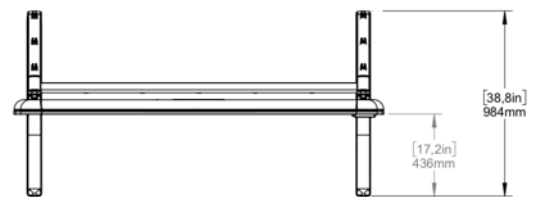
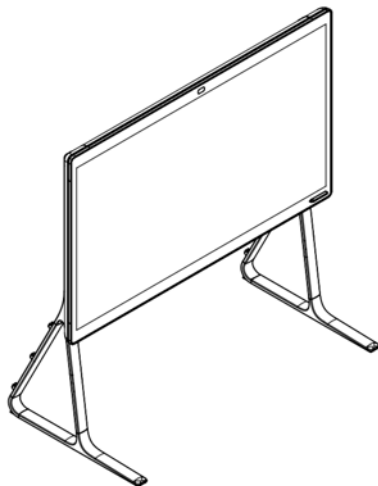
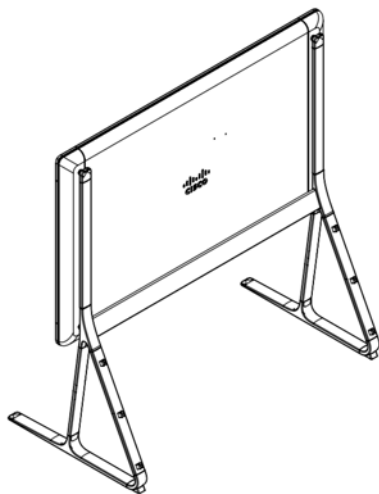
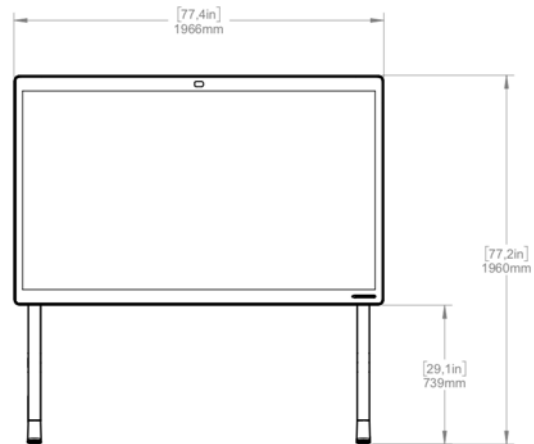
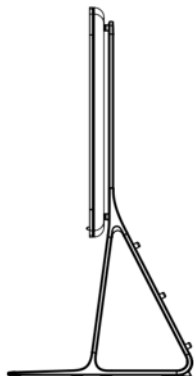
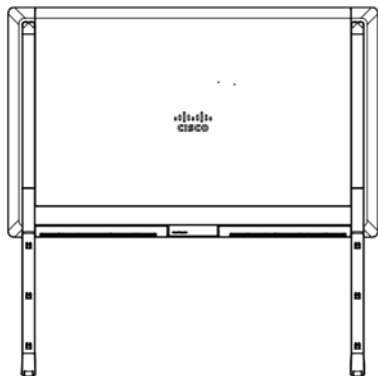
mm

Sheet size:

A3

Scale:

1:20



Total weight, Main unit and FloorStand: 135 kg / 298 lbs

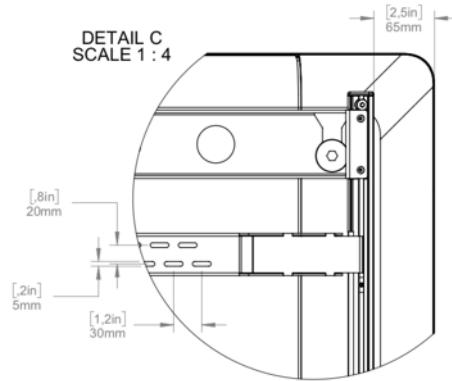
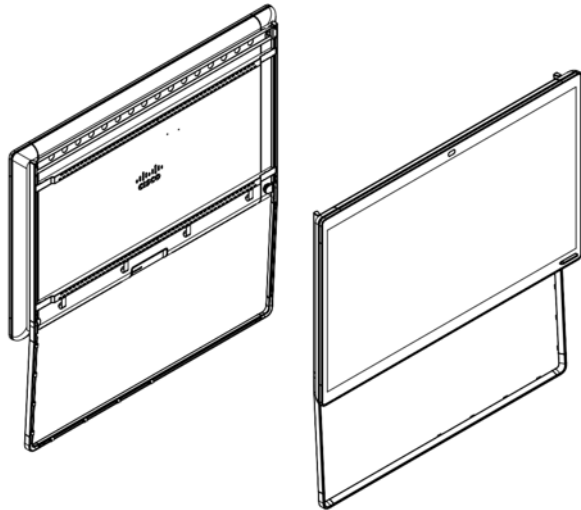
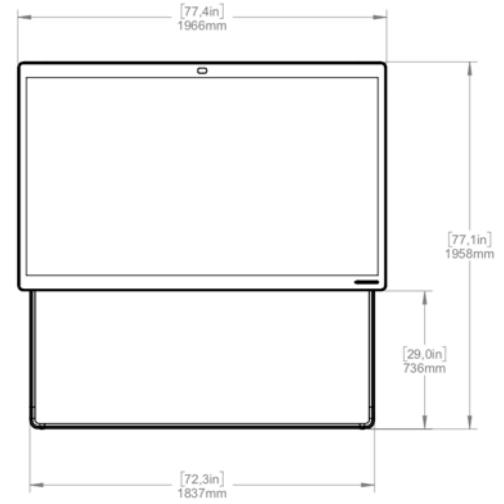
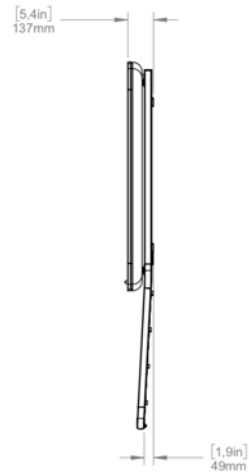
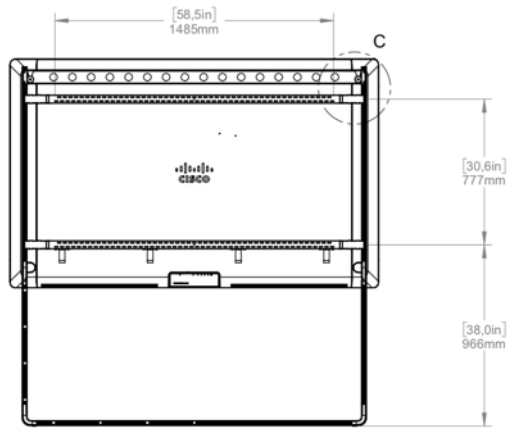
Webex Board 85S

Main Unit on FloorStand

Sheet 4 of 6

European projection 

Unit: mm  
 Sheet size: A3  
 Scale: 1:20



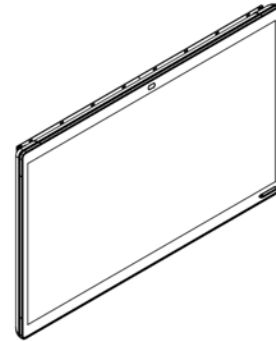
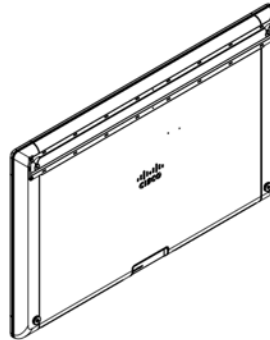
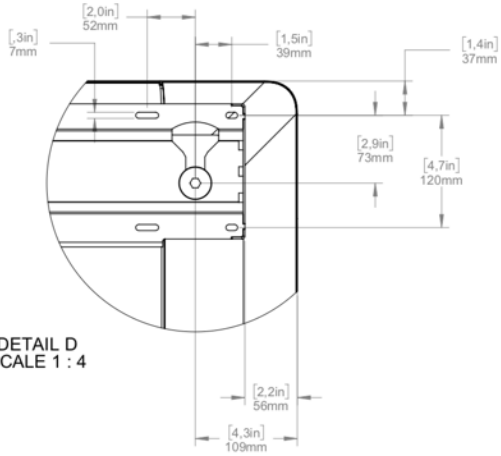
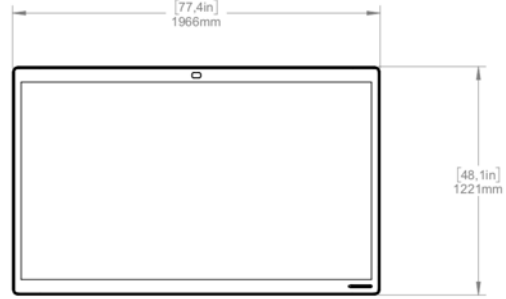
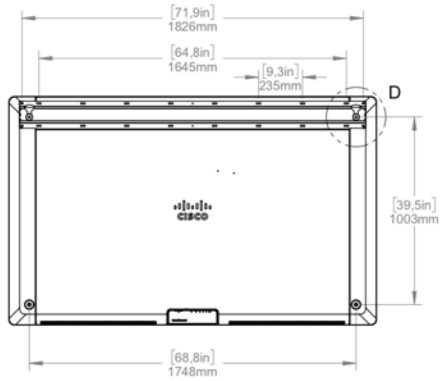
Total weight, Main unit and WallStand: 115 kg / 254 lbs

Webex Board 85S  
Main Unit on WallStand

Sheet 5 of 6

European projection

Unit: mm  
Sheet size: A3  
Scale: 1:20



Total weight, Main unit and WallMount: 109 kg / 240 lbs

## Webex Board 85S

### Main Unit WallMounted

Sheet 6 of 6

European projection 

Unit: mm  
Sheet size: A3  
Scale: 1:20

