User Manual

HTML5 Web Panel Startup Guide

Table of Contents

Chapter1. Overview

1.1. Specification

1.1.1. cMT3072XP (W)

7" HTML5 Web Panel

Feature

- 7" 1024 x 600 Wide Viewing Angle LCD
- Tempered Glass Capacitive Touch Panel
- Built- in 4GB Flash Memory and RTC
- Fan-less Cooling System
- PCB coating process ensures high reliability to resist from corrosion in harsh environment.
- Built-in Power Isolator
- NEMA4 / IP66 Compliant Front Panel
- Powerful and versatile Chromium browser

Display	Display	7” Wide Viewing Angle (WVA)
	Resolution	1024 x 600
	Brightness (cd/m2)	450
	Contrast Ratio	800:1
	Backlight Type	LED
	Backlight Life Time	>30,000 hrs.
	Colors	16.7M
	LCD Viewing Angle (T/B/R/L)	85/85/85/85
	Pixel Pitch (mm)	0.1506 (H) x 0.1432 (V)
Touch Panel	Type	Tempered Glass, Capacitive Type
	Hardness Scale	7H
Memory	Flash	4 GB
	RAM	1 GB
Processor		Quad-core RISC
I/O Port	SD Card Slot	N/A
	USB Host	USB 2.0 x 1
	USB Client	N/A
	Ethernet	LAN 1: 10/100 Base-T x 1 LAN 2: 10/100 Base-T x 1
	COM Port	N/A
	RS-485 Dual Isolation	N/A
	CAN Bus	N/A
	HDMI	N/A
	Audio Output	N/A
RTC		Built-in
Power	Input Power	24±20%VDC
	Power Isolation	Built-in
	Power Consumption	820mA@24VDC
	Voltage Resistance	500VAC (1 min.)
	Isolation Resistance	Exceed 50MΩ at 500VDC
Specification	PCB Coating	Yes
	Enclosure	Plastic
	Dimensions WxHxD	200.3 x 146.3 x 36.9 mm
	Panel Cutout	192 x 138 mm
	Weight	Approx. 0.7 kg
	Mount	Panel mount
Environment	Protection Structure	UL Type 4X (indoor use only) / NEMA4 / IP66 Compliant Front Panel
	Storage Temperature	-20° ~ 60°C (-4° ~ 140°F)
	Operating Temperature	0° ~ 55°C (32° ~ 131°F)
	Relative Humidity	10% ~ 90% (non-condensing)
	Altitude	3,000 m
	Vibration Endurance	10 to 25Hz (X, Y, Z direction 2G 30 minutes)
Certificate	CE	CE marked
	UL	cULus Listed
Software	Browser	Chromium 132 (Upgradable)
	Weincloud	EasyAccess 2.0 (Optional)

1.1.2. cMT3108XP (W)

10.1" HTML5 Web Panel

Feature

- 10.1" 1280 x 800 Wide Viewing Angle LCD
- Tempered Glass Capacitive Touch Panel
- Built- in 4GB Flash Memory and RTC
- Fan-less Cooling System
- PCB coating process ensures high reliability to resist from corrosion in harsh environment.
- Built-in Power Isolation
- NEMA4 / IP66 Compliant Front Panel
- Compatible with M02 WiFi Expansion Module that supports wireless communication.
- Powerful and versatile Chromium browser

Display	Display	10.1” Wide Viewing Angle (WVA)
	Resolution	1280 x 800
	Brightness (cd/m^2)	425
	Contrast Ratio	800:1
	Backlight Type	LED
	Backlight Life Time	>50,000 hrs.
	Colors	16.7M
	LCD Viewing Angle (T/B/L/R)	89/89/89/89
	Pixel Pitch (mm)	0.1695 (H) x 0.1695 (V)
Touch Panel	Type	Tempered Glass, Capacitive Type
	Hardness Scale	7H
Memory	Flash	4 GB
	RAM	1 GB
Processor		Quad-core RISC
I/O Port	SD Card Slot	N/A
	USB Host	USB 2.0 x 1
	USB Client	N/A
	Ethernet	LAN 1: 10/100/1000 Base-T x 1 LAN 2: 10/100 Base-T x 1
	WiFi	M02 WiFi Expansion Module (Optional)
	COM Port	N/A
	RS-485 Dual Isolation	N/A
	CAN Bus	N/A
	HDMI	N/A
	Audio Output	Built-in Mono Speaker
RTC		Built-in
Power	Input Power	24±20%VDC
	Power Isolation	Built-in
	Power Consumption	700mA@24VDC
	Voltage Resistance	500VAC (1 min.)
	Isolation Resistance	Exceed 50MΩ at 500VDC
Specification	PCB Coating	Yes
	Enclosure	Plastic
	Dimensions WxHxD	266 x 196 x 42.7 mm
	Panel Cutout	255 x 185 mm
	Weight	Approx. 1.1 kg
	Mount	Panel mount, VESA mount 75 x 75 mm
Environment	Protection Structure	UL Type 4X (indoor use only) / NEMA4 / IP66 Compliant Front Panel
	Storage Temperature	-20° ~ 60°C (-4° ~ 140°F)
	Operating Temperature	0° ~ 55°C (32° ~ 131°F)
	Relative Humidity	10% ~ 90% (non-condensing)
	Altitude	3,000 m
	Vibration Endurance	10 to 25Hz (X, Y, Z direction 2G 30 minutes)
Certificate	CE	CE marked
	ATEX	ATEX Zone 2/22 Category 3 G/D
	UL	cULus Listed
Software	Browser	Chromium 89 (Upgradable)
	Weincloud	EasyAccess 2.0 (Optional)

1.1.3. cMT3162X (W)

15.6" HTML5 Web Panel

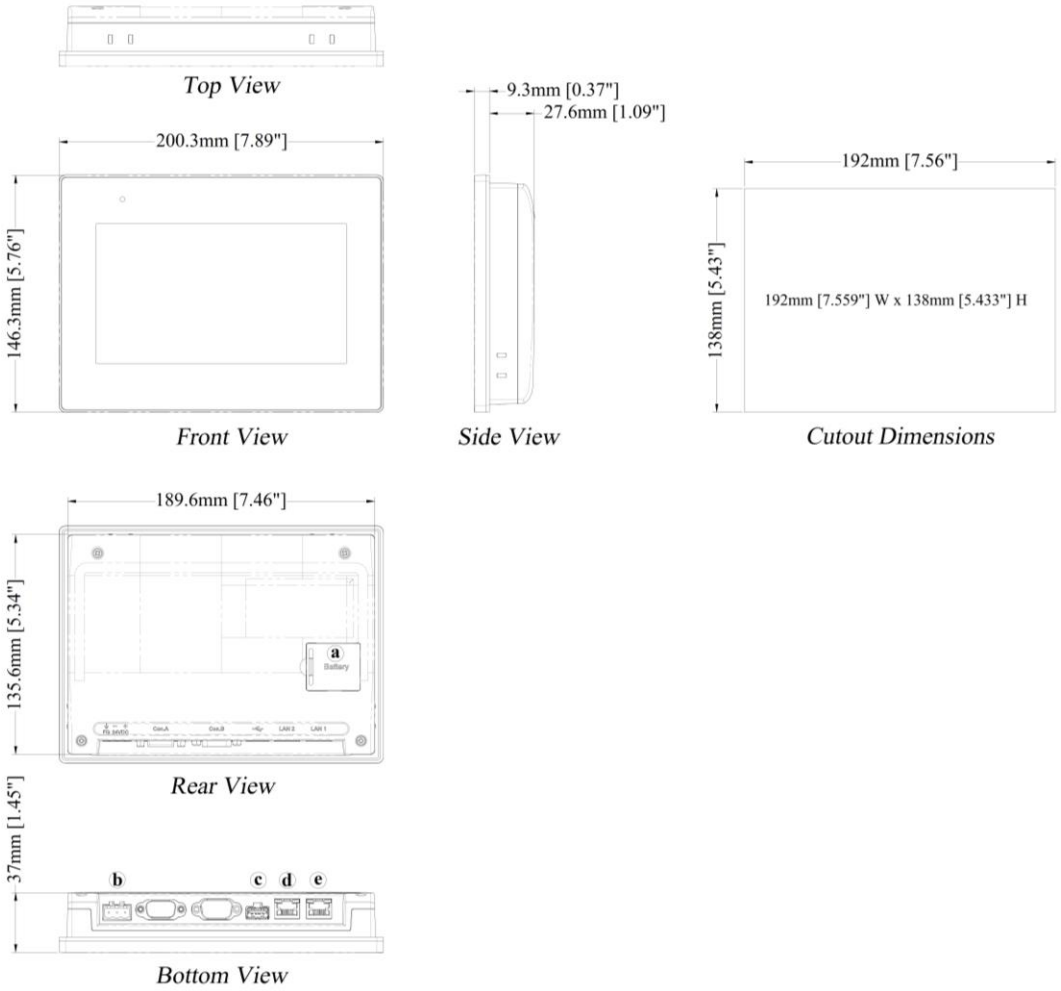
Feature

- The oTP integrated touch solution offers an edge-to-edge design, high-resolution and high-transmittance.
- Supports Vibration Alerting
- 15.6" 1920 x 1080 Wide Viewing Angle LCD
- Built- in 4GB Flash Memory and RTC
- Fan-less Cooling System
- PCB coating process ensures high reliability to resist from corrosion in harsh environment.
- Built-in Power Isolation
- NEMA4/IP66 Compliant Front Panel
- Powerful and versatile Chromium browser

Display	Display	15.6” Wide Viewing Angle (WVA)
	Resolution	1920 x 1080
	Brightness (cd/m^2)	300
	Contrast Ratio	800:1
	Backlight Type	LED
	Backlight Life Time	>30,000 hrs.
	Colors	16.2M
	LCD Viewing Angle (T/B/R/L)	89/89/89/89
	Pixel Pitch (mm)	0.17925(H) x 0.17925(V)
Touch Panel	Type	Tempered Glass, Capacitive Type
	Hardness Scale	7H
Memory	Flash	4 GB
	RAM	1 GB
Processor		Quad-core RISC
I/O Port	SD Card Slot	N/A
	USB Host	USB 2.0 x 1
	USB Client	N/A
	Ethernet	LAN 1: 10/100/1000 Base-T x 1 LAN 2: 10/100 Base-T x 1
	COM Port	N/A
	RS-485 Isolation	N/A
	CAN Bus	N/A
	HDMI	N/A
	Audio Output	Built-in Mono Speaker
RTC		Built-in
Power	Input Power	24±20%VDC
	Power Isolation	Built-in
	Power Consumption	1.3A@24VDC
	Voltage Resistance	500VAC (1 min.)
	Isolation Resistance	Exceed 50MΩ @ 500VDC
Specification	PCB Coating	Yes
	Enclosure	Front bezel: Plastic, Rear Enclosure: Aluminum
	Dimensions WxHxD	400 x 263 x 27.6 mm
	Panel Cutout	384 x 247 mm
	Weight	Approx. 1.6 kg
	Mount	Panel mount, VESA mount 100 x 100 mm
Environment	Protection Structure	NEMA4 / IP66 Compliant Front Panel
	Storage Temperature	-20° ~ 60°C (-4° ~ 140°F)
	Operating Temperature	0° ~ 50°C (32° ~ 122°F)
	Relative Humidity	10% ~ 90% (non-condensing)
	Altitude	3,000 m
	Vibration Endurance	10 to 25Hz (X, Y, Z direction 2G 30 minutes)
Certificate	CE	CE marked
	UL	cULus Listed
Software	Browser	Chromium 89 (Upgradable)
	Weincloud	EasyAccess 2.0 (Optional)

1.2. Dimensions

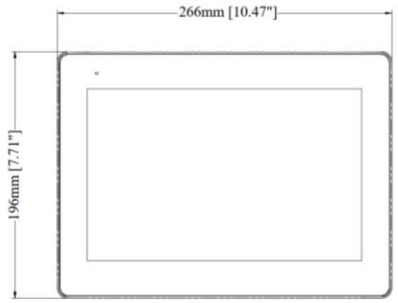
1.2.1. cMT3072XP (W)



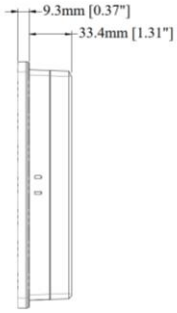
a	Battery
b	Power Connector
c	USB Host Port
d	LAN 2
e	LAN 1

1.2.2. cMT3108XP (W)

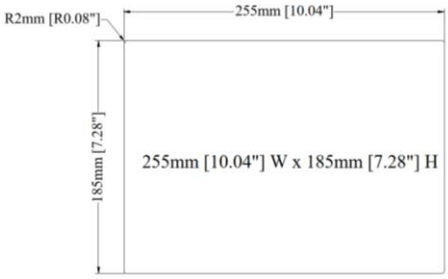
Top View



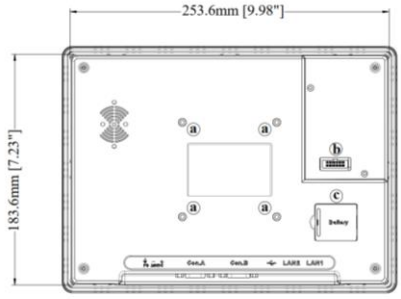
Front View



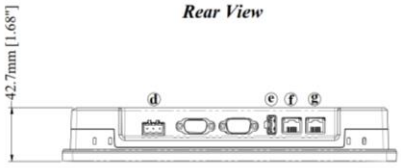
Side View



Cutout Dimensions



Rear View



Bottom View

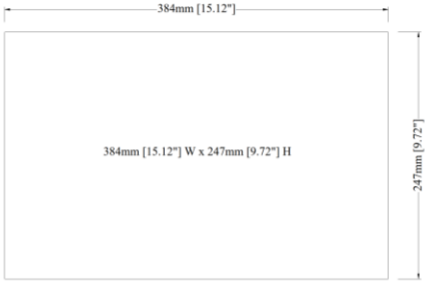
a	VESA 75 mm Screw Holes
b	Expansion Module Connector
c	Battery
d	Power Connector
e	USB Host Port
f	LAN 2
g	LAN 1

1.2.3. cMT3162X (W)

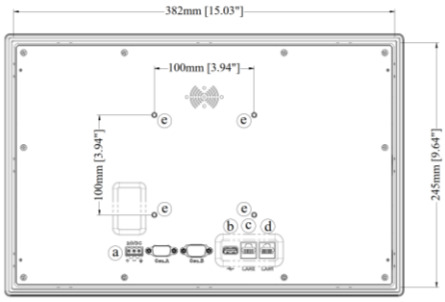
Top View

Front View

Side View



Cutout Dimensions



Rear View

Bottom View

a	Power Connector
b	USB Host
c	LAN2
d	LAN1
e	VESA 100mm Screw Holes

1.3. Ethernet Port

The HTML5 Web Panel provides two Ethernet ports. LAN1 supports 10/100/1000M, while LAN2 supports 10/100M. The indicators are as follows:
Orange LED: Indicates LAN connection status.
Green LED: Indicates active communication status.
For Ethernet connections, please use a CAT-6 network cable.

1.4. CR2032 Battery

The HTML5 Web Panel requires a CR2032 lithium battery to keep the RTC running.
Battery specification: CR2032 3V lithium battery

1.5. Power Connection

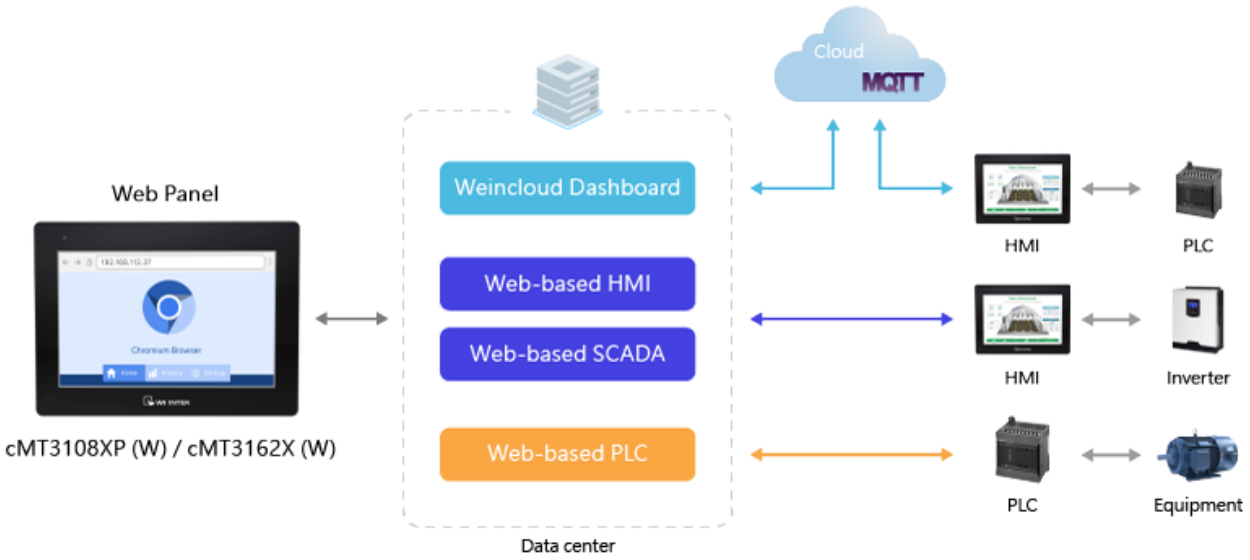
The HTML5 Web Panel can only be powered by DC power. The specified DC voltage range is 24±20 volts, ensuring compatibility with most controller DC power systems. The power conditioning circuitry inside the unit is managed by a switching power supply, and the peak starting current can reach up to 2A.

Note: Connect positive DC line to the '+' terminal and the DC ground to the '-' terminal.

1.6. Operating Environment

1. Built-in web client program: Google Chromium.
2. Supports connection to various web servers, web-based SCADA systems, PLCs, and HMIs. For best compatibility, use websites developed with standard HTML5.
3. Using Weintek HMI as an example, it allows the use of EasyWeb 2.0 for editing HMI interface settings and WebView for monitoring HMI screens through a web browser.
4. The built-in browser does not support websites requiring Java Applets or the Java SDK.

Chapter2. HTML5 Web Panel Applications



The HTML5 Web Panel is equipped with a built-in web browser, allowing direct access to various systems with web servers over the network. Here are several common applications:

- **Weincloud Dashboard**

The Weincloud Dashboard visualizes on-site data and facilitates the quick setup of a dedicated cloud monitoring center. Management personnel can swiftly obtain an overview of on-site status through the web interface. The URL for the Dashboard can be configured on the HTML5 Web Panel, making it easy to clearly present production data and utilization indices.

- **Web-based HMI**

Using Weintek HMI as an example, the system settings page of EasyWeb 2.0 and the screen monitoring function via WebView allow the HTML5 Web Panel to modify the system parameters of the on-site HMI and control the HMI display through a browser. A single HMI combined with multiple HTML5 Web Panels can now provide comprehensive service, eliminating the need for multiple HMIs. Only one HMI file needs to be managed.

- **Web-based SCADA**

Many SCADA systems are based on web interfaces. After configuration, on-site data can be tracked, displayed, and analyzed via the web. The HTML5 Web Panel only needs to know the corresponding URL to easily connect with the plant's SCADA system.

- **Web-based PLC**

Some PLCs also feature web server functionality, offering not only a webpage for setting PLC parameters but also the ability to edit display screens, such as with CODESYS WebVisu. The HTML5 Web Panel can be used to monitor PLCs as well.

Chapter3. System Settings

Upon the first power-up, the default screen will appear. Tapping the System Settings button allows access to the system settings login screen. The default password is 111111.

3.1. System

In the System Settings page, it is possible to configure information related to the device, including system information, display settings, diagnostics, and more.

3.1.1. System Info

Setting	Description
HMI Name	Modify the HMI name here.
Date/Time	Click to change the time information.

HMI Info Collector

Setting	Description
Version	View the current version of the HMI Info Collector.
HMI Info Collector	Click to directly download a file that stores HMI information. This file can be provided for analysis in case the HMI encounters an unexpected error.

3.1.2. Display/Misc

Setting	Description
Brightness	Adjust the brightness of the backlight.
Audio	Choose whether to enable audio.
Audio Volume	After enabling audio, adjust the volume level.
Touch Sound Feedback	When enabled, the touchscreen emits sound effects.
Touch Sensitivity	Set appropriate touch sensitivity for different environments.
Show Mouse Cursor	Enable to display the mouse cursor.
Direction	Adjust the display orientation of the HMI screen.
Input Method	Language of the keyboard popup when typing; supports multiple languages.
Startup Image	**Customize** Allows customization of the startup screen; countdown timer and System Settings button will be retained. **Reset** Reset to the default startup screen.

Backlight Saver

Setting	Description
Enable Timeout	When enabled, the backlight will turn off based on the idle timeout settings.
Idle Timeout (minutes)	Set the duration for the idle timeout.

3.2. Web Browser

All parameters related to the web browser can be configured here, including the default URL and countdown timer settings.

3.2.1. Web Browser Setting

Setting	Description
Default Website	Set the URL that will be accessed after the countdown finishes on the default screen.
Countdown before Start	The waiting time after entering the default screen before attempting to access the preset URL.
Enable Navigation Bar	When enabled, a navigation bar will appear at the top of the web browser.

Diagnostics

Setting	Description
Remote Debugging	Determine whether to enable remote debugging for the web browser. The communication port must be configured.
Delete Browsing Data	Delete browsing data from the web browser.
Reset Browser	Reset the web browser settings.

3.3. Network

Network-related settings can be configured here, including Ethernet, wireless networks, and hotspots.

3.3.1. Ethernet

Setting	Description
LAN 1 (WAN)	Configure the IP parameters for LAN 1. Usually used for external network connections, requiring the setup of IP address, subnet mask, gateway, and domain name system.
LAN 2 (LAN)	Configure the IP parameters for LAN 2. Usually used for internal network connections to isolate internal networks from external ones. To avoid network conflicts, LAN1 and LAN2 should be set in different domains.

Bridge Mode	Enable bridge mode to connect LAN1 and LAN2 within the same domain, achieving switch functionality. Users must confirm the connections of both network ports; improper connections may create loops, leading to broadcast storms. After confirmation, click to execute.

3.3.2. WiFi (For cMT3108XP (W) only)

Setting	Description
WiFi	Enable WiFi functionality.
AP List	Search for wireless access points in the area; connect by entering the password.
Join other(SSID)	Manually join a wireless access point.
801.1X EAP	Configure encryption communication for the wireless network.

3.3.3. Hotspot (For cMT3108XP (W) only)

Setting	Description
Hotspot	Enable hotspot functionality to share wireless network from this HTML5 Web Panel.
SSID	Set the display name for the wireless access point.
Security	Choose the encryption method for communication.
Password	Set the access password for the wireless access point.
Hotspot server address	Configure the IP address for the HTML5 Web Panel to act as a hotspot server.
Hotspot dhcp address range	Specify the range of IP addresses that will be allocated when connecting to this hotspot.

3.4. Features

3.4.1. VNC/WebView Setting

VNC Setting

Setting	Description
Enable	When enabled, VNC clients are allowed to connect and interact with the screen.
VNC Multi Connection	When enabled, up to 3 VNC clients can connect simultaneously.
Require Password	When enabled, a password must be used to log in to the VNC function.
VNC Password	Configure and modify the VNC login password.

WebView Setting

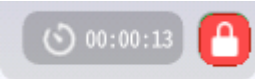
Setting	Description
Enable	When enabled, VNC clients are allowed to connect and interact with the screen.
Force HTTPS	When enabled, the WebView page will be forced to use the HTTPS protocol.
Use Same HTTP Port as EasyWeb	When enabled, the WebView page will connect to the VNC server on port 80 when using HTTP.
Use WebView as home page	When enabled, entering the IP address in the browser will directly access the WebView page.
User List	Select the user to log in to WebView.
Automatic Login	Automatically log in to WebView using the selected user. Note that users can log out manually and log in with a different user.
Control User	This user can view and control WebView. The login password can be modified.
View User	This user can only view WebView. The login password can be modified.

WebView Timeout Setting

Setting	Description
Enable Timeout	When enabled, WebView will close according to the idle timeout settings.
Idle Timeout (minutes)	Set the duration for the idle timeout.

VNC/WebView Interlock

Setting	Description
Enable	Enable the screen lock function. Users of the HTML5 Web Panel /

	VNC / WebView will not be affected by each other.
Timeout (seconds)	Set the timeout duration. After this period, control will be released, allowing the next client in line to gain control.
Status Bar Style	Regular  Minimal 

3.5. Weincloud

3.5.1. EasyAccess 2.0

Activate EasyAccess 2.0 and configure settings related to the proxy server.

3.6. Administration

3.6.1. System Password

Modify the login password for the system settings page.

3.6.2. OS Update

OS updates can be performed here. See chapter 4 in this manual for more information.

3.6.3. Restore Factory Default

Reset the web browser and all local settings to restore them to factory default values. This can only be performed on the HTML Web Panel.

Chapter4. OS Update

The OS version on the HTML5 Web Panel can be updated via Ethernet or USB drive.

4.1. Updating the OS

Please note that OS update failures can render the HTML5 Web Panel unusable, so care must be taken during the update. Ensure a stable power supply throughout the process.

4.1.1. Updating via EasyWeb 2.0

Step 1. Open a web browser (Windows Edge, Chrome, Firefox) and enter the IP address of the HTML5 Web Panel (e.g., 192.168.2.121). Enter the password on the login page to access the settings.

Step 2. Under the Administrator tab, find and open the OS Update tab.

Step 3. Click [Update], select the OS file, and then click [Update] to start the process.

4.1.2. Updating via USB Drive

Step 1. Place the OS file (.bin) onto a USB drive and insert it into the HTML5 Web Panel.

Step 2. Enter the password on the login page to access the settings.

Step 3. Under the Administrator tab, find and open the OS Update tab.

Step 4. Tap [Update], select the OS file in the USB drive and then tap [Update] to start the process.