

1.1. Features

The key features of FACE CAMERA Series are shown in the following table:

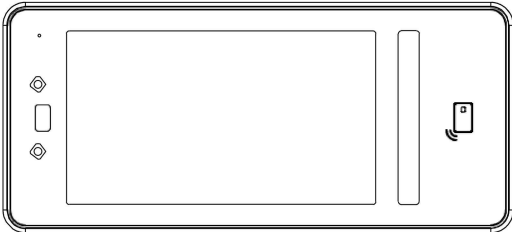
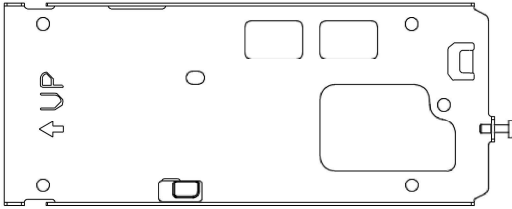
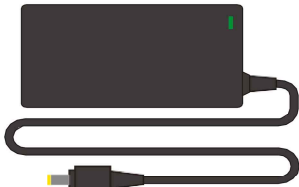
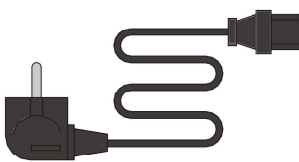
Feature	Description
State-of-the-art optical design	Optical design utilizes highest quality optics and a very fast shutter speed, allowing the system to exceed industry norms for image quality.
Dual face cameras	Two cameras—one in visible and one in NIR—optimize face detection in the lowest of ambient lighting conditions and provide for superior live face detection.
Wide angle face imaging	Flexibly tune coverage for the site: wide for general entrances, or narrow/shifted ROI to reduce unintended detections in lanes and turnstiles.
Advanced real-time subject tracking with simple user instructions	Accurately locates the subject face in real time.
Intuitive user interface	Modeled after latest smart-phone user displays, the user experience will be intuitive and effortless for virtually all subjects.
Adaptive Field of View	Proprietary and configurable adjustment where face detection is active. Allows for optimized detection of single, intended face in variety of physical deployment configurations.
Digital pan-and-tilt	Optimizes presentation of face framing on display.
Face matching engine (on-board)	Latest generation neural network-based encoding and matching algorithm delivers highest levels of matching accuracy. Includes integrated dual cameras with algorithm co-processor for fastest processing speeds.
Display of authentication (matching) results	Automatic display of matching results, positioned adjacent to subject's face.
Language support	English, Korean, Simplified Chinese, Traditional Chinese, Japanese, Arabic, Spanish, Italian, Turkish, French
Large on-board (embedded) face template database	Stores up to 50,000 active face templates on-board in 1:N recognition (identification) mode.
High speed face matching	Up to 50,000 matches per second on-board.
Widest range of lighting conditions	Embedded illuminators in both white and NIR ranges expand use in adverse ambient lighting environments.

Feature	Description
Standard multi-band RFID reader	Mifare, DesFire, FeliCa card support with standard embedded ISO/ IEC 14443 reader.
HID™ compatible card reader	HID Omnikey™ embedded card reader optional, for compatibility with range of HID cards.
Live face detection	YES, included in proprietary algorithm.
Mask and helmet (PPE) detection	Detects face masks and safety helmets to support PPE (personal protective equipment) policy enforcement in environments such as construction sites.
Outdoor-friendly protection	IP65 / IK06 rated housing supports outdoor and semi-outdoor installation conditions.
Intercom capability	Built-in microphone and speaker plus one-way video streaming enable entry intercom use cases.
BLE	Bluetooth 5.2 enables modern mobile credential and peripheral scenarios.
PoE (power over Ethernet)	Optional IEEE 802.3af support simplifies installation where PoE infrastructure is available.
Powerful and simple SDK	High-level SDK architecture supports fast integration. APIs reside on host-side applications in Windows C++, Windows C# (.NET) and Linux OS, minimizing device-level programming. Reference code supplied.
Access control panel connectivity	Supports dual Wiegand and OSDP connections with SDK programming
Full range of deployment options	Standard connections include Ethernet, Wiegand (IN and OUT), GPI, RS-485, dry contact relay, tamper detection, factory reset button, SIM socket, USB host.

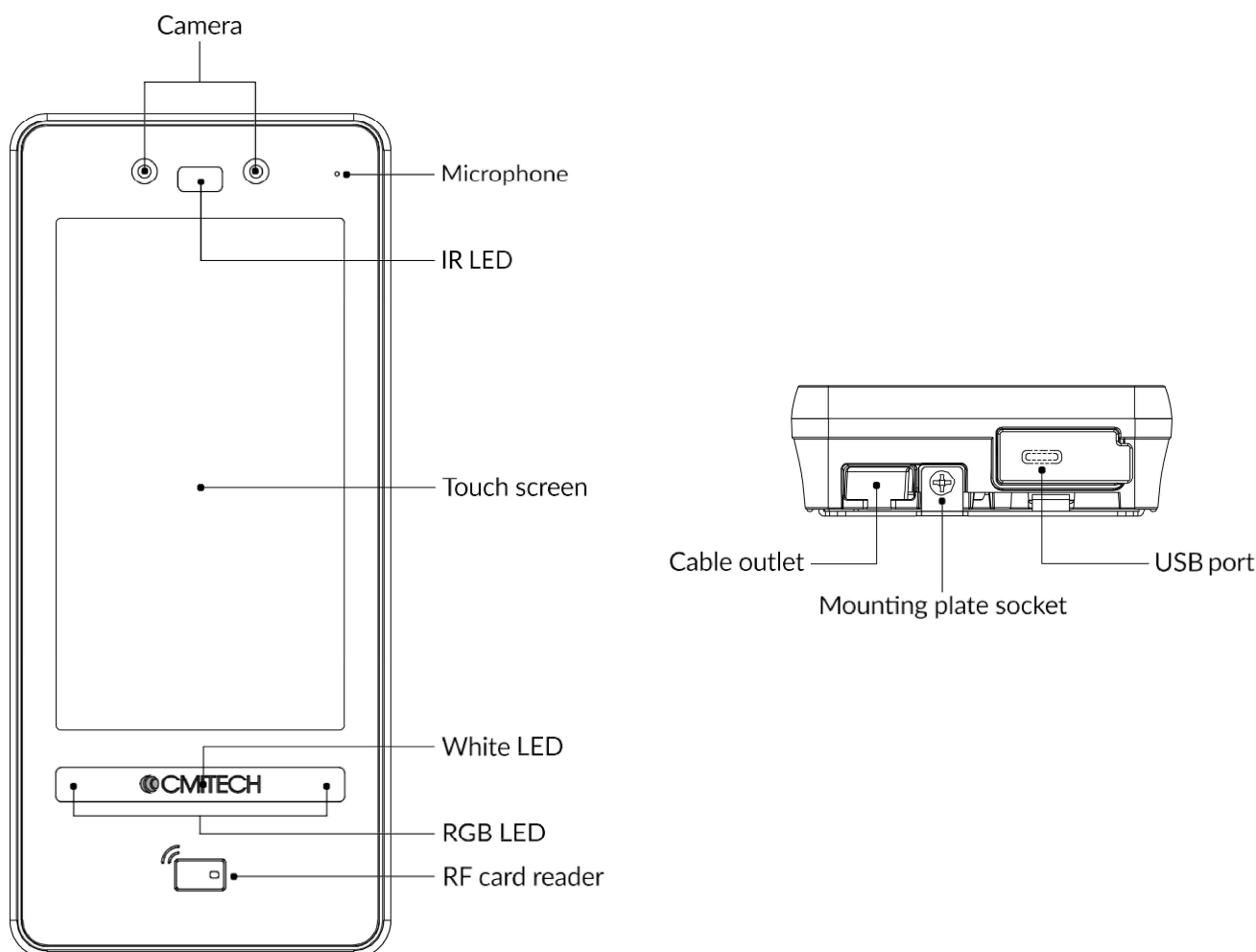
1.2. Components

Before you begin, make sure that all the following items are included with your device. If you find anything is missing, contact your dealer.

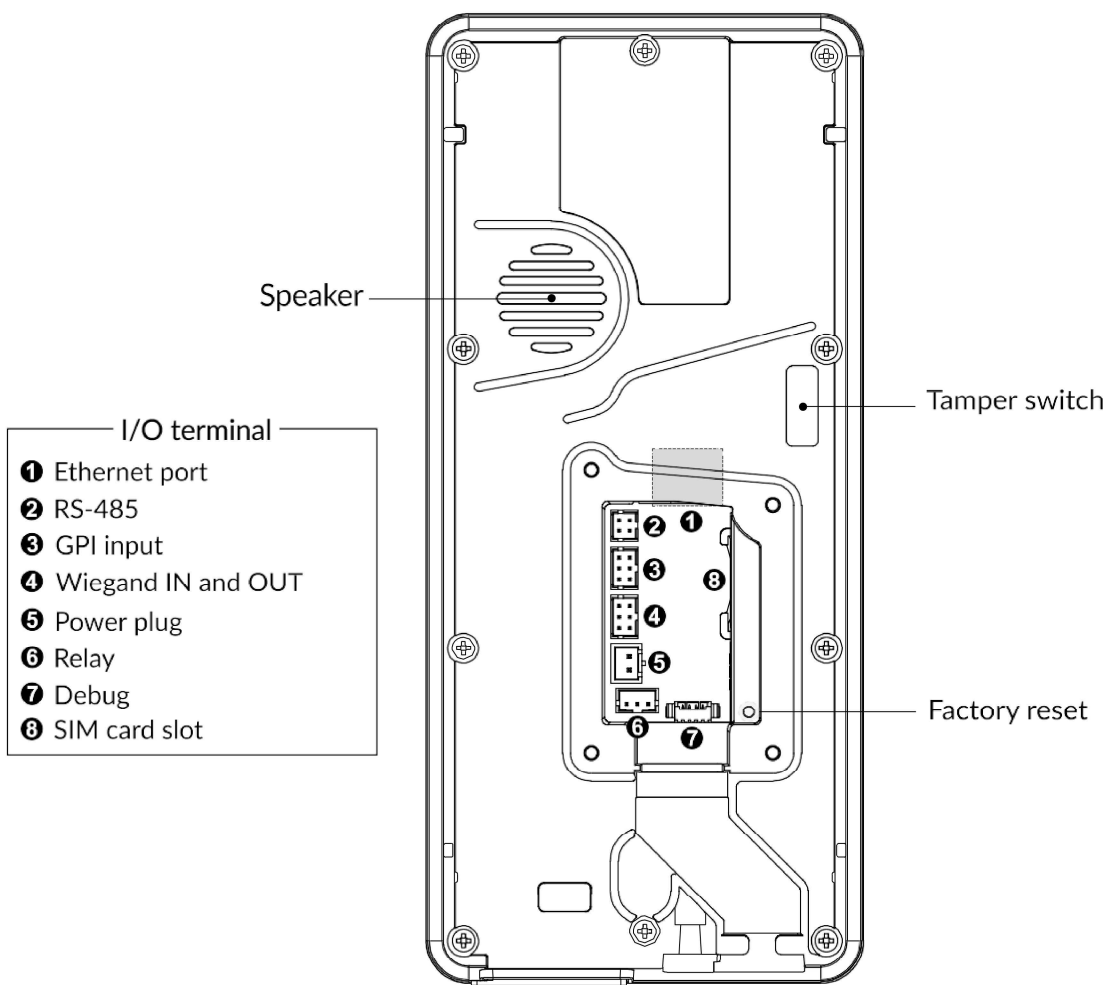
FACE CAMERA component table

Name	Q'ty	Image	Note
FACE CAMERA Series	1		
Mounting Plate	1		
Power	1		
RS-485	1		
Relay	1		
Cables	1		
GPI	1		
Wiegand	1		Output: 15VDC, 3.0A
AC adapter	1		Optional
Power cord	1		

1.3. Parts and Controls

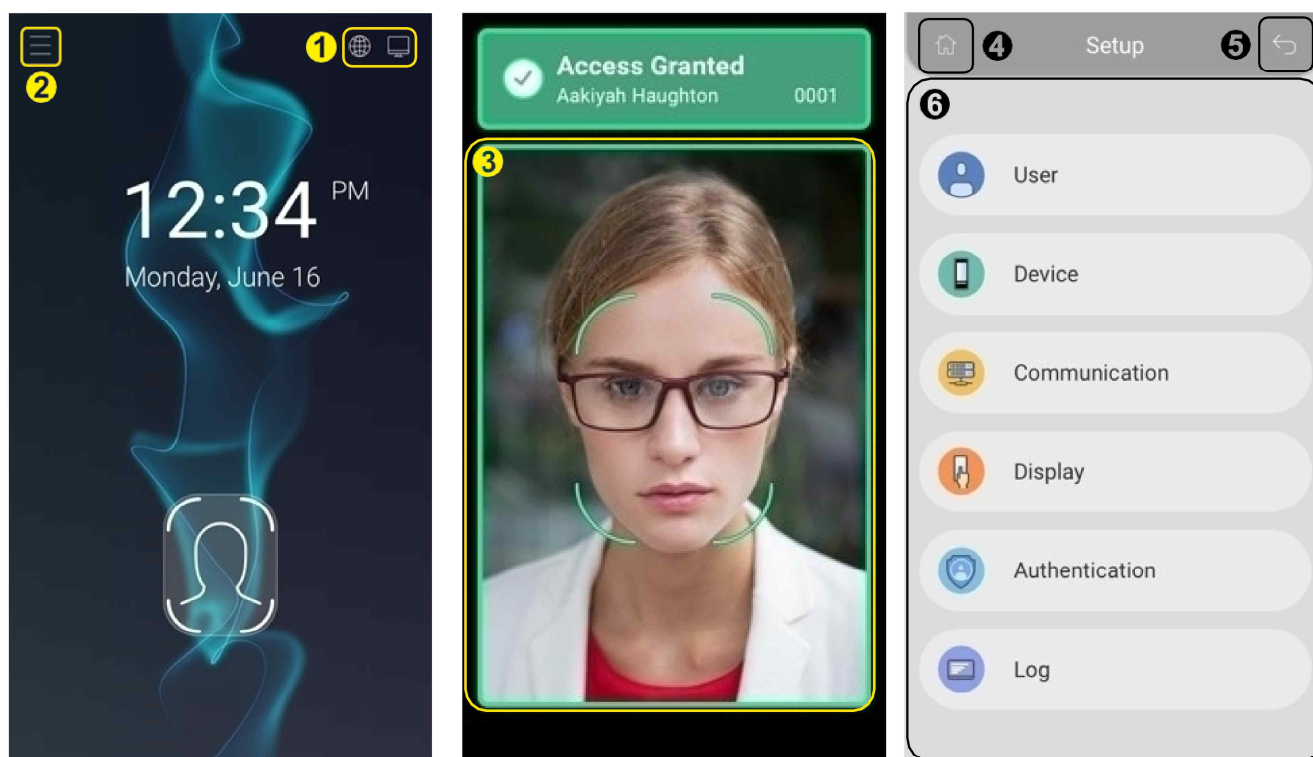


Name	Description	Note
Camera	Captures the face images	
IR LED	Illuminates the face using the NIR lighting when capturing the faces	
Touch screen	Shows preview images before capture and provides a graphical interface for enrollment and device configuration	
White LED	Gives supplemental light in dim light	
RGB LED	Indicates the status of the device with different colors and blinking patterns	
RF card reader	Indicates the area where RF cards can be read	
Cable outlet	The opening where the power and peripheral cables go out from the device.	
Mounting plate socket	Attaches the unit with the mounting plate	
USB port	Connects a USB flash drive (Type-C, For maintenance)	Not User Accessible



Name	Description	Note
Tamper switch	Starts an alarm, if configured, when a physical tampering attempt is detected	
Factory reset button	Restores the device to its original manufacturer settings	
Speaker	Delivers sound from device	
Ethernet port	Connects an ethernet cable	
RS-485	Connects the RS-485 cable	
GPI input	Connects the GPI cable	
Wiegand IN/OUT	Connects the Wiegand cable (input and output)	
Power plug	Connects the power cable	
Relay	Connect the relay cable	
Debug	Reserved for debugging purposes only	
SIM card slot	Indicates the area where a SIM card can be connected	Optional

1.3.1. Touch Screen



No.	Name	Description	Note
1	Status indicator	Shows the status of network connection and third party application	• White: online • Red: offline or not usable
2	Menu icon	Enters the device setup menu screen	
3	Preview screen	Gives a preview of subject's face	See Menu List for more information
4	Home button	Goes to the home screen	
5	Back button	Goes back to the previous menu screen	
6	Settings	Shows settings menu – User, Device, Communication, Display, Authentication, Log	

2. Installing FACE CAMERA

This chapter gives the information about the requirements and the prerequisites for installing FACE CAMERA and the installation procedures.

2.1. Installation Requirements

Before installation, make sure that the following requirements are met.

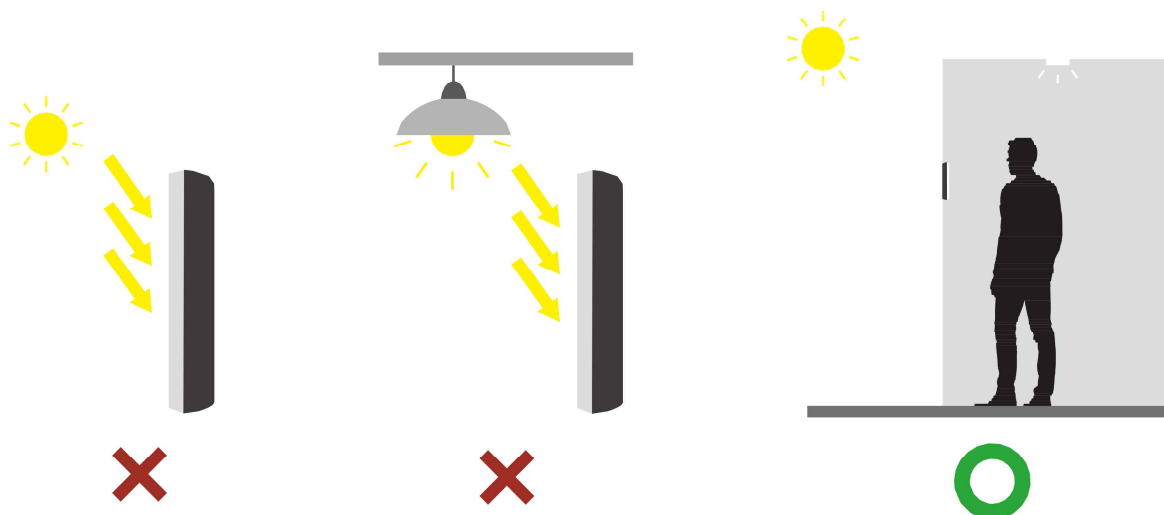
2.1.1. Environmental Requirements



The FACE CAMERA is designed and intended for indoor use only. The device is not weatherproof and must not be exposed to water, ice, extreme temperatures or other adverse weather conditions. If it is required to use the device in outdoor or extreme environments, contact local sales or service@cmi-tech.com for more information.

- ☑ Avoid the location that is exposed to backlight, direct sunlight, and other strong illumination.
- ☑ Choose the location with moderate ambient light.

Environmental requirements



- ☑ Determine the height at which you install the device.



The recommended mounting height is 135 cm (53 inches) from the floor to the bottom of the device. It covers a person's height from 120 cm (47 inches) up to 210 cm (83 inches) at the distance of 100 cm (39 inches) from