

# Intercom Modular Outdoor Station

Part of the Dahua Modular Intercom System



- 2MP Wide Angle Camera with Night Vision
- Built-in Microphone with Two-way Talk
- Records Call Sessions from the Indoor Monitor
- Access Control Supports Two Locks
- Performs Remote Door Unlock
- Compatible with Two-wire or RJ45 Connection
- Supports Secure Password Entry
- Anodized Aluminum Panel can be Surface- or Flush-mounted
- Fully Customizable System
- IP65 Ingress Protection and IK07 Vandal Resistance

## System Overview

The Dahua Intercom Modular System is a complete intercom solution that offers full customization of the entire system. This intercom system starts with a 2MP outdoor video intercom module that offers a wide-angle view lens, high-resolution images even in dark environments, and two-way talk. Then, add optional modules that offer door access capability (card reader, fingerprint reader, and keypad), call buttons, information text display, and status light indicators. The system also offers optional accessories to flush-or surface-mount a two-or three-module intercom system.

### Modular Intercom Components

- DHI-VTO4202F-P-S2: 2 MP Outdoor Video Intercom (Required)
- DHI-VTO4202F-MB5: Five-button Call Panel
- DHI-VTO4202F-MF: Fingerprint Reader
- DHI-VTO4202F-MK: Keypad
- DHI-VTO4202F-ML: Status Light Panel
- DHI-VTO4202F-MN: Blank Panel
- DHI-VTO4202F-MS: Information Text Display

## Technical Specification: DHI-VTO4202F-P-S2

### System

Main Processor	Embedded Processor
Operating System	Embedded Linux

### Video

Image Sensor	1/2.5-in. 2 MP CMOS Sensor
Lens	1.9 mm
Angle of View	Horizontal: 168.6° Vertical: 87.1° Diagonal: 176.7°
Wide Dynamic Range	120 dB
Noise Reduction	3D NR
Compression	H.265, H.264
Resolution	Main Stream: 720p at 30 fps Sub Stream: 1080p 30 fps
Bit Rate	256 Kbps to 4 Mbps
Day/Night	Auto (ICR)

### Audio

Compression	G.711a, G.711u, PCM
Input	Omnidirectional Microphone
Output	Built-in Speaker
Bi-directional Talk	Support for Dual-way Bi-directional Talk
Enhancement	Echo Suppression, Digital Noise Reduction
Bit Rate	16 KHz, 16 Bit

### Interface

Ports	One (1) Electric Lock One (1) Exit Button One (1) Door Status Detection One (1) Lock Control
Alarm Output	One (1) Channel
Power Output	12 VDC, 100 mA

**Technical Specification: DHI-VTO4202F-P-S2, continued**

Network

Ethernet	One (1) RJ45 10/100 Mbps Port
Network Protocols	SIP; P2P; IPv4; UPnP; SNMP; DNS; DDNS; RTSP; RTP; TCP; UDP

Certifications

Safety	EN 62368-1:2014/A11:2017
Electromagnetic Compatibility (EMC)	CFR 47 FCC Part 15 subpart B EN 55032:2015; EN 61000 3 2:2014 EN 61000 3 3:2013; EN 55024:2010/A1:2015; EN 55035:2017; EN 50130 4:2011/A1:2014

Electrical

Power	<ul style="list-style-type: none"> <li>DHI-VTNS2003B-2, Dahua Two-wire Switch (maximum power supply distance 50.0 m [164.04 ft])</li> <li>48 VDC, 1 A</li> <li>PoE (IEEE802.3af Class 0)</li> </ul>
Power Consumption	≤ 12 W

**Technical Specification: DHI-VTO4202F-P-S2, continued**

Environmental

Operating Temperature	-30° C to +60° C (-22° F to +140° F)
Operating Humidity	10% to 95%, Relative (non-condensing)
Operating Altitude	0 m to 3000.0 m (0 ft. to 9842.52 ft)
Ingress Protection	IP65
Vandal Resistance	IK07

Construction

Material	Anodized Aluminum
Color	Silver
Dimensions	100.0 mm x 100.0 mm x 36.0 mm (3.94 in. x 3.94 in. x 1.41 in.)
Net Weight	0.35 kg (0.77 lb)
Gross Weight	0.40 kg (0.88 lb)
Installation	Surface- or Flush-mount

**Technical Specifications: Intercom Modules**

	DHI-VTO4202F-MB5 <sup>1</sup>	DHI-VTO4202F-MK	DHI-VTO4202F-MF	DHI-VTO4202F-MS	DHI-VTO4202F-ML	DHI-VTO4202F-MR	DHI-VTO4202F-MN	
Function	Five-button Call Panel	Keypad	Fingerprint Reader	Information Text Display	Status Light Panel	IC Card Reader	Blank Panel	
Main Processor	Embedded MCU Processor						—	
Button Type	Five Buttons, Mechanical	Metal Backlit Keyboard	—	—	—	—	—	
Indicator Light	—	—	—	—	Three (3): Incoming Call Outgoing Call Unlock	—	—	
Display	—	—	—	3.0 in. STN	—	—	—	
Electrical	Power Supply	5 VDC (Provided with power by other modules)						—
	Power Consumption	1 W						—
Environmental	Operating Temp.	-20°C to +60°C (-4°F to +140°F)						—
	Operating Humidity	10% to 90%, Relative						—
	Ingress Protection	IP65						—
	Vandal Resistance	IK07						—
	Dimensions	Full Panel 100.0 mm x 100.0 mm x 31.0 mm (3.94 in. x 3.94 in. x 1.22 in.)				Half Panel 100.0 mm x 49.90 mm x 28.50 mm (3.94 in. x 1.96 in. x 1.12 in.)		

1. The intercom modular system supports a maximum of eight (8) DHI-VTO4202F-MB5 call-button panels.

**End of Life (EOL) Intercom Modules**

	DHI-VTO4202F-MR	
Function	IC Card Reader	
Main Processor	Embedded MCU Processor	
Button Type	—	
Indicator Light	—	
Display	—	
Electrical	Power Supply	5 VDC (Provided with power by other modules)
	Power Consumption	1 W
Environmental	Operating Temp.	-20°C to +60°C (-4°F to +140°F)
	Operating Humidity	10% to 90%, Relative
	Ingress Protection	IP65
	Vandal Resistance	IK07
	Dimensions	Half Panel 100.0 mm x 49.90 mm x 28.50 mm (3.94 in. x 1.96 in. x 1.12 in.)

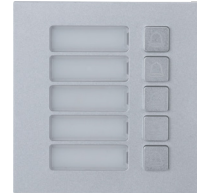
Ordering Information		
Type	Part Number	Description
Video Intercom, Required	DHI-VTO4202F-P-S2	2 MP Outdoor Station
Intercom Modules, optional	DHI-VTO4202F-MB5	Five-button Call Panel
	DHI-VTO4202F-MF	Fingerprint Reader
	DHI-VTO4202F-MK	Keypad
	DHI-VTO4202F-ML	Status Light Panel
	DHI-VTO4202F-MN	Blank Panel
	DHI-VTO4202F-MR	IC Card Reader
	DHI-VTO4202F-MS	Information Text Display
Mounting Accessories, optional	VTM125	Two-module Front Panel Bezel (use with VTM127 or VTM02R2)
	VTM126	Three-module Front Panel Bezel (use with VTM128 or VTM03R3)
	VTM127	Two-module Flush-mount Box (use with VTM125)
	VTM128	Three-module Flush-mount Box (use with VTM126)
	VTM03R3	Three-module Surface-mount Box (use with VTM128)
	VTM52R2	Two-module Surface-mount Box (use with VTM125)
	VTM53R3	Three-module Surface-mount Box (use with VTM128)
	VTM54R4	Intercom Surface-mount Box for DHI-VTO4202F (2 x 2 system)
	VTM56R6	Intercom Surface-mount Box for DHI-VTO4202F (2 x 3 system)
Two-wire Switch, optional	DHI-VTNSB2003B-2	Two-wire Intercom Power Supply Switch
Power Supply, optional <sup>2</sup>	ADS-65LSI-52-1 48060G VI	Power adapter for DHI-VTNS2003B-2 Power Input: 100 VAC to 240 VAC Power Output: 48 VDC, 1.25 A
	EDP-240-48	Power adapter for DHI-VTNS2003B-2 Power Input: 100 VAC to 240 VAC Power Output: 48 VDC, 5 A

2. One of the listed power adapters is required for the DHI-VTNS2003B-2.

Intercom Module Images



DHI-VTO4202F-P-S2  
2 MP Outdoor Station



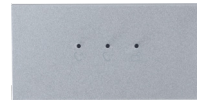
DHI-VTO4202F-MB5  
Call Button Panel



DHI-VTO4202F-MF  
Fingerprint Reader



DHI-VTO4202F-MK  
Keypad



DHI-VTO4202F-ML  
Status Light Panel



DHI-VTO4202F-MN  
Blank Panel



DHI-VTO4202F-MS  
Information Text Display

Mounting Accessory Images



VTM125  
Two-module  
Front Panel Bezel



VTM126  
Three-module  
Front Panel Bezel



VTM127  
Two-module  
Flush-mount Box



VTM128  
Three-module  
Flush-mount Box



VTM03R3  
Three-module  
Surface-mount Box



VTM52R2  
Two-module  
Surface-mount Box



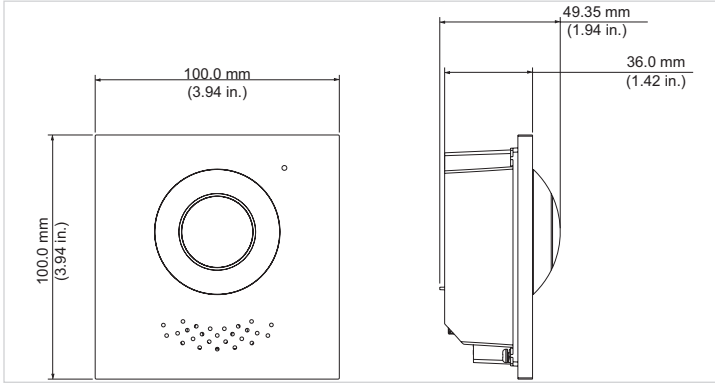
VTM54R4  
2 x 2 Surface-mount  
Box



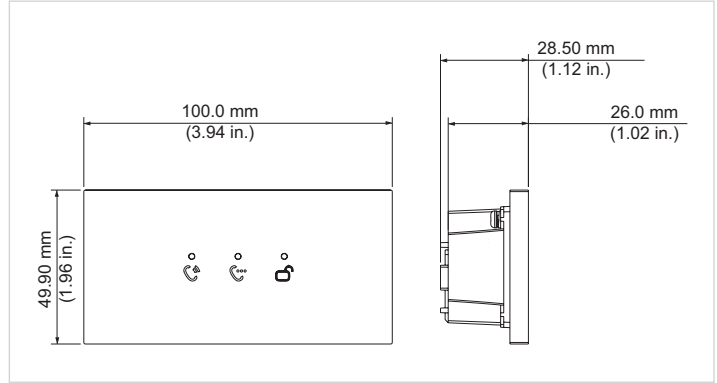
VTM56R6  
2 x 3 Surface-mount  
Box

**Module Dimensional Drawings**

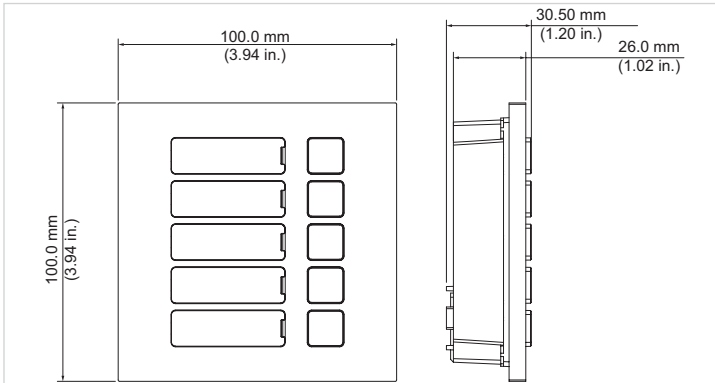
**DHI-VTO4202F-P-S2**



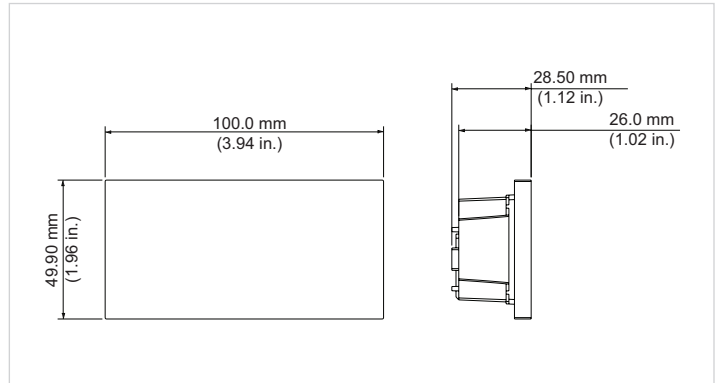
**DHI-VTO4202F-ML**



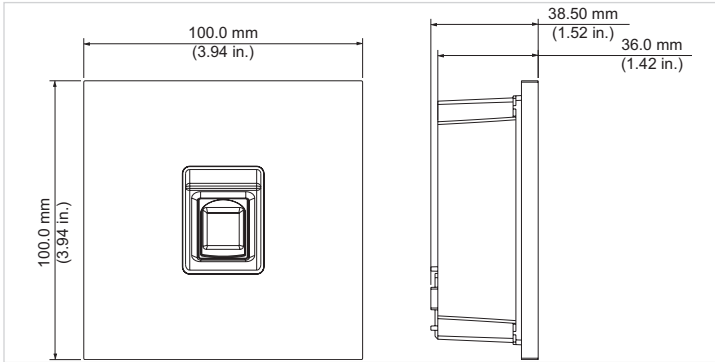
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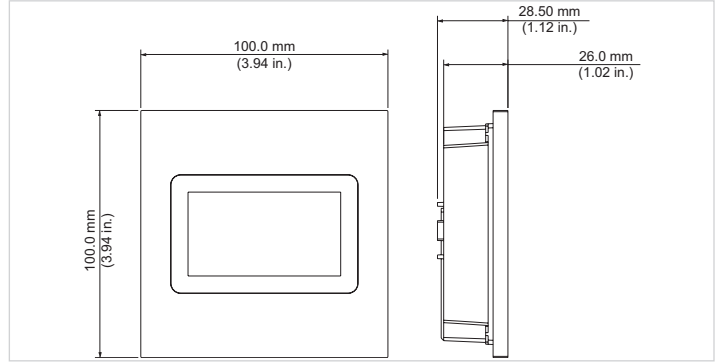
**DHI-VTO4202F-MN**



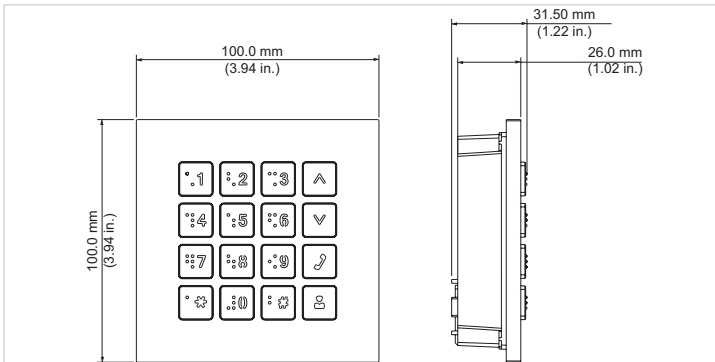
**DHI-VTO4202F-MF**



**DHI-VTO4202F-MS**

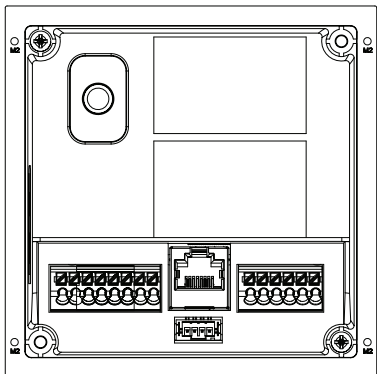


**DHI-VTO4202F-MK**

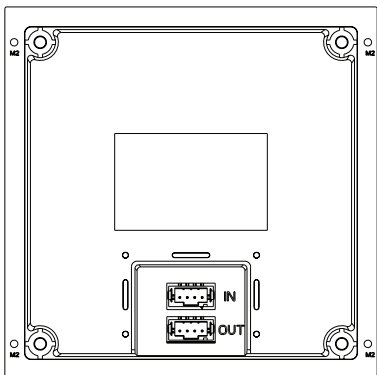


Module Rear Panel Drawings

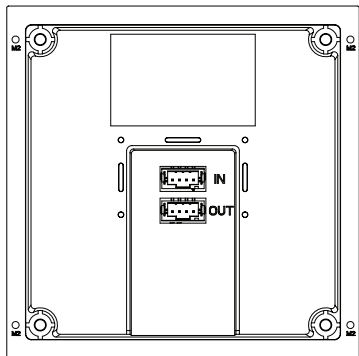
DHI-VTO4202F-P-S2



DHI-VTO4202F-MB5 / DHI-VTO4202F-MF / DHI-VTO4202F-MK



DHI-VTO4202F-MS



DHI-VTO4202F-MN

