

**IPC-H300M Series**

Edge AI Network Dome Camera

3MP / Edge AI Algorithms / H.265 Network Dome Camera

A compact network dome camera built around a 1/3" low-lux CMOS sensor and an integrated 2K ISP. The camera supports dual-stream H.265/H.264 encoding, an onboard 0.5 TOPS AI processor for customizable intelligent detection, and dual-light illumination (IR + white light) for full-color night vision. Housed in a compact vandal-resistant dome enclosure for ceiling or wall mount.

Model	IPC-H300M
Product Name	Edge AI Network Dome Camera
Image Sensor	1/3" CMOS, New ISP 2K
Built-in Lens	2.1mm / 2.8mm (fixed, order option)
Video Compression	H.265, H.264
Manufacturer	Qualitech Technology Pte. Ltd.
Document No.	QL-IPCH300M-V1.1.0
Revision	V1.1.0
Issue Date	August 2026

Key Specifications

Model	IPC-H300M
Image Sensor	CMOS, New ISP 2K, 1/3"
Illumination	Color 0.1Lux@F1.2; B&W 0.01Lux@F1.2
Signal-to-Noise Ratio	≥50dB (AGC OFF)
WDR	DWDR > 80dB
Built-in Lens	2.1mm / 2.8mm (fixed, order option — see Ordering Information)
Video Compression	H.265, H.264
Main Stream	2560×1440, 2304×1296, 1920×1080, 1280×720 — 1-30fps
Sub Stream	704×576, 800×448, 640×480, 640×360, 352×288 — 1-30fps
Bit Rate	128Kbps – 8192Kbps, continuously adjustable
Subtitle Overlay	Channel name, date & time, stream, resolution, and up to 5 lines of custom characters

Illumination & Imaging

Item	Description
IR Light Module	Optional
White / Warm Light	Dual-light illumination, full-color night vision (optional)
Day/Night Mode	Automatic IR-Cut switching (optional)

Intelligent Function

Function	Description
AI Processing	Onboard 0.5 TOPS AI processor, customizable detection algorithms
Human Detection	Detects and classifies human-shaped targets

Tripwire / Perimeter Protection	Virtual line-crossing detection with alarm trigger
Face Capture	Captures facial snapshots from the video stream

Network & Interface

Item	Description
Protocol	ONVIF
Browser Access	IE6.0 and above (web viewer)
Mobile Access	iOS, Android
Audio Input	1CH microphone input
Audio Output	1CH speaker output (max. speaker spec 2W 4Ω)
IO Function	IRCUT control, Reset
Local Storage	MicroSD (TF card) slot, optional

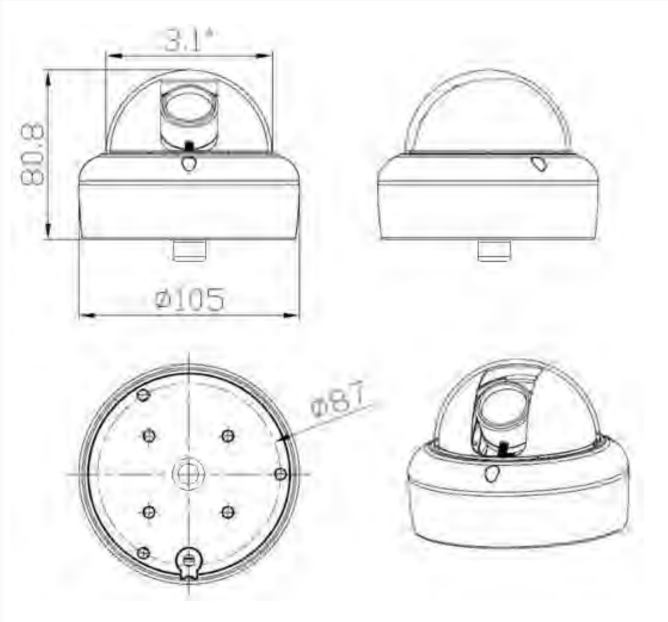
Technical Specifications

Camera Mounting	360° pan, 70° tilt / 180° pan, 140° tilt
Construction	Aluminum base case for ceiling or wall mount
Work Temperature	-10°C to +60°C
Humidity	0 to 90% relative, non-condensing
Power Source	DC12V
Power Consumption	1.2W (100mA @ 12V)
Color of Base	White / Dark Gray

Work temperature and humidity ratings reflect the more conservative of the enclosure and onboard module specifications.

Dimension

Type A Dome Enclosure



BASE DIAMETER Ø105MM · HEIGHT 80.8MM · MOUNTING HOLE CIRCLE Ø87MM · LENS OPENING 3.1"

Ordering Information

Model	Description
IPC-H300M-F2.1	Edge AI Network Dome Camera — 2.1mm fixed lens, wide-angle coverage
IPC-H300M-F2.8	Edge AI Network Dome Camera — 2.8mm fixed lens, narrower field of view with finer detail

Support & Partnership

Qualitech Technology provides technical guidance and engineering support services for partners.

Contact

COMPANY

Qualitech Technology Pte. Ltd.

SALES ENQUIRIES

sales@qualitech-sg.com

WEBSITE

www.qualitech-sg.com

MODEL

IPC-H300M

PRODUCT NAME

Edge AI Network Dome Camera

Specifications in this document are subject to change without prior notice. All trademarks are the property of their respective owners. © 2026 Qualitech Technology Pte. Ltd. All rights reserved.