BIOMETRICS BY FINGERPRINTS™

Designed, developed and made in Germany

D2101FV Fingerprint 50

IP VIDEO DOOR STATION

For single-family houses and commercial buildings with 1 unit
Fingerprint Reader Module · 1 Call Button

ANSWER YOUR DOOR ANYWHERE.

HOW DOES IT WORK?

Imagine, you are not at home and your children have locked themselves out or the courier wants to deliver a parcel. With DoorBird this is no longer a problem. Every time someone rings the doorbell you will get a push notification on your smartphone or tablet. Via the DoorBird App you can talk to visitors and also see them live in HD quality. You will never miss a visitor again. With DoorBird you are on the move and yet at home, even if a burglar rings at the door to check if someone is at home.

SMART HOME STARTS AT THE FRONT DOOR

DoorBird is the smart solution for your house entrance. Simply connect your DoorBird IP Video Door Station to your smartphone and talk to your visitor – anywhere you are. The IP Video Door Station can be used as a stand-alone unit or can be integrated into an existing Smart Home platform. Even existing classic installations such as an electric door opener can still be used and controlled via the DoorBird App.

QUALITY MADE IN GERMANY

All DoorBird products are designed, developed and produced by Bird Home Automation GmbH in Berlin, Germany. We manufacture all products with the greatest care and precision, and deliver them to our customers all over the world.

Open API
- Local interface for integration with third-party systems and SIP

Video and audio call
- On smartphones, tablets (iOS, Android), IP and landline phones (SIP)

Smart Transmission Mode (STM)
- Real-time audio / video communication, optimized for mobile devices via WiFi, 3G, 4G, 5G
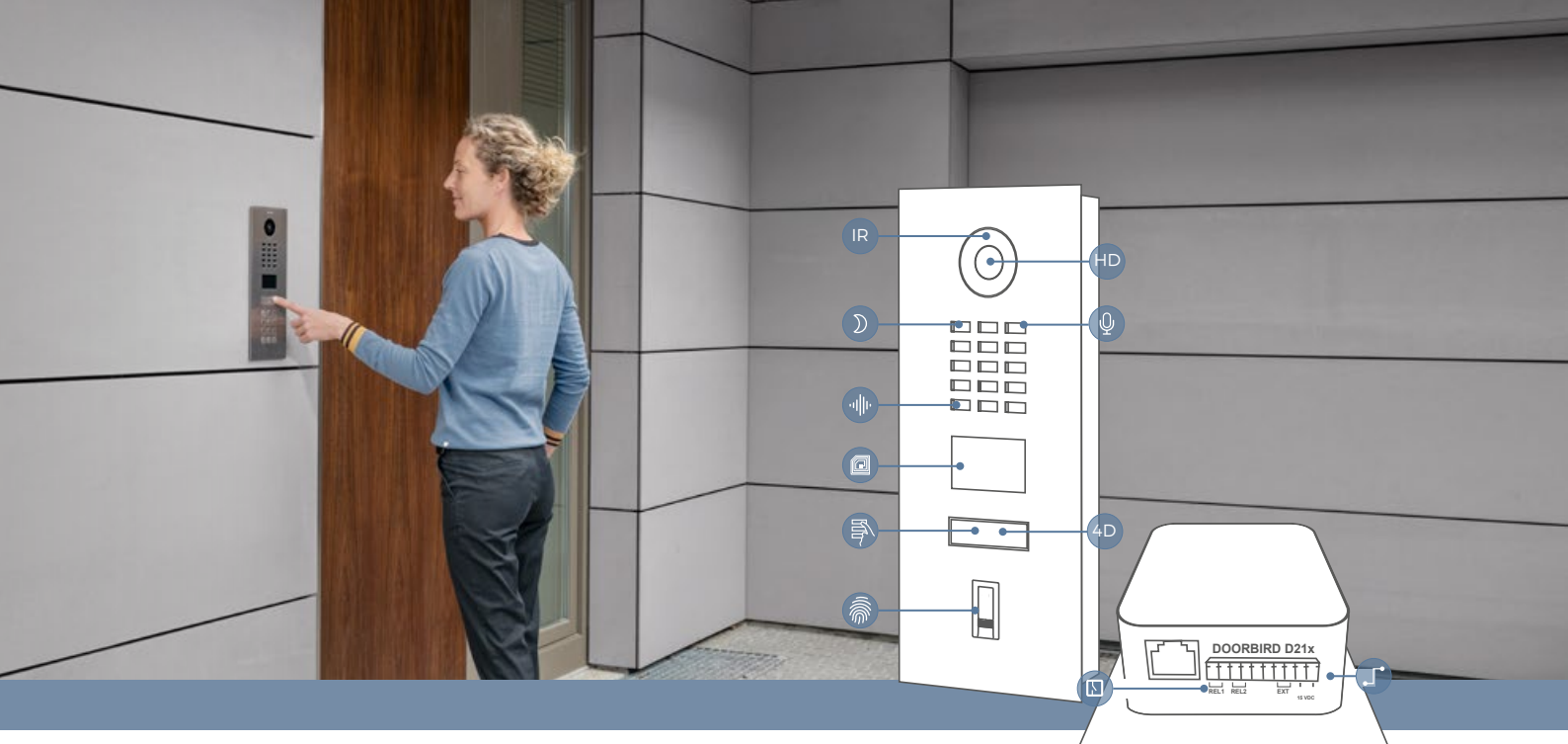
Smart Home & NVR compatible
- Control4, Loxone, Crestron, Synology, AVM FRITZ!Fon, URC, QNAP, RTI, ELAN, Fibaro, Bang & Olufsen and others

Microphone
- Clear voice transmission

DOORBIRD D21x

🔓 **Automatic door buzzer**
- For use in medical offices and office environments

HD **HDTV Video**
- Ultra wide-angle, hemispheric lens, 180˚

4D **Motion sensor with 4D technology**
- Distance up to 10 m adjustable via App (interval: 1 m)

📹 **Free visitor history**
- Store still images for free, optional video recording available

🌙 **Light sensor**
- For night vision mode

✍ **Call button**
- With backlit nameplate

📅 **Individual action schedules, e.g.:**
- RFID card "abc" has only access on Wednesday from 9 am until 11 am
- 4D motion sensor switches on external lamp between 9 pm and 6 am

👆 **Fingerprint reader**
- Supported number of fingerprints: 50
- Status LED (RGB)
- Touch sensor

Easy connection to the network
- Connection via a network cable or bell wire via 2-Wire Ethernet PoE Converter "DooBird A1071" (PoE, network data)

📍 **Geofencing**
- Automatic door and gate opening when returning home

📶 **Noise reduction and echo cancellation (AEC, ANR)**

Two freely configurable bi-stable switching relays
- Two doors or gates can be controlled via App
- Status configurable via App: temporary or permanent circuit

IR **Night vision**
- With 12 Infrared LEDs

🔲 **RFID reader**
- Configurable remotely via App (e.g. time frame)

BIOMETRIC IDENTIFICATION WITH A HUMAN TOUCH

DoorBird cooperates only with the best of its class: Our fingerprint reader is equipped with the technology of Fingerprint Cards AB (Fingerprints™) – the world's leading biometrics company, with its roots in Sweden. Fingerprints™ technology is found in hundreds of millions of devices and applications, and is used billions of times every day, providing safe and convenient identification and authentication with a human touch.

The solution by DoorBird brings together superior biometric performance and security, high standard of quality components and a capacitive touch sensor for our IP door stations and IP access control units.

REMOTE CONFIGURATION

The enrollment of a new fingerprint is done comfortably via App or our web-based dashboard available at https://webadmin.doorbird.com. A fingerprint can also be deleted remotely in real-time in case the access has to be revoked.

Using our fingerprint reader, you can restrict access authorization to specific days and times. This way, you determine who can enter your home or building and when. You can also define individually per fingerprint which action should be executed, e.g. trigger relay 1 or relay 2, trigger an IP I/O door controller, call a HTTP(s) URL, arm or disarm an alarm system, open a smart lock or trigger a building automation system event.

WEATHERPROOF SENSOR

Our fingerprint reader is especially designed for areas exposed to strong outdoor weather conditions, e.g. heat and cold, and does not lose its functionality. To ensure error-free detection, the sensor surface must be dry and clean. The touch sensor is effectively superior to line-based readers in terms of security, comfort and speed, and it also allows a lower installation height.

DATA-PRIVACY AND SECURITY

The reader does not store any fingerprint images. It stores only one template per fingerprint in form of a mathematically calculated hash value. Biometric features are not transmitted to the DoorBird Door Station, the app or the cloud. Thus, our system meets the highest data protection and data security standards.

In addition, the fingerprint reader has a locking mechanism which prevents attempts at manipulation, temporarily locking the system after multiple unauthorized access attempts. To increase the security even more, the fingerprint reader has no built-in relays. Instead, you can securely release a detached relay with the DoorBird I/O Door Controller A1081, which is connected to a DoorBird IP Video Door Station.

FINGERPRINT READER FEATURES

- Touch sensor
- Configurable via App or web-based dashboard
- Status LED (RGB)
- Fully integrated into DoorBird IP Video Door Stations
- 1,000 times more secure than a 4-digit keypad PIN code
- Manipulation prevention system
- Event history with time stamp
- No more misplaced, forgotten, lost or stolen keys possible
- No unauthorized use of PIN codes or RFID key fobs possible, a fingerprint is unique per person
- Personalized time frames and actions

- Supported number of fingerprints (template storage): 50
- Compatible with DoorBird IP Video Door Stations of the D21x and D11x series

TECHNICAL SPECIFICATIONS

DoorBird
Technology meets Design.

GENERAL

Front panel	3 mm (0.12 in) Available in brushed stainless steel V2A / V4A and V2A with bronze and titanium finish, DB 703, RAL 7016
Mounting type	Flush- or surface-mounted, mounting housing sold separately
Power supply	15 V DC (max. 15 W) or Power over Ethernet (PoE 802.3af Mode-A)
Call button	Plastic. Engravable metal nameplate sold separately, see www.doorbird.com/buy
Nameplate	Illuminated
Fingerprint Reader Module 50	Configurable via App • Individual events (e.g. switch a relay, HTTP(s) request) • Individual schedules • 50 fingerprints manageable • Event history Multicolored Status LED • Normal mode: –Green + success sound: successfully authenticated –Red + error sound: unrecognized fingerprint (e.g. unknown fingerprint or wet touch sensor field - dry it with a tissue) –Pink: Manipulation prevention (too many failed attempts, locked out for min. 30 seconds) • Enrollment mode: –Blue: wait for finger to touch –Green + no sound: scan step successful –Green + success sound: entire scan step successful (enrollment done) –LED goes off: Timeout during enrollment • Start-up mode: –Yellow: Hardware test successful –Red: Hardware test not successful (broken)
Weight	1381 g
Connectors	• RJ45, for LAN/PoE • Bi-stable latching relay #1, max. 24 V DC/AC, 1 A, e.g. for electric door opener • Bi-stable latching relay #2, max. 24 V DC/AC, 1 A, e.g. for electric door opener • External input for external door opener button • 15 V DC input (+, -), max. 15 W • Relays can be expanded / detached with DoorBird I/O Door Controller
Weather-proof	Yes, IP65
Approvals	IP65, CE, FCC, IC, RoHS, IK08, REACH, IEC/EN 62368, IEC/EN 62471
Dimensions	313 x 131 x 48,75 mm (H x W x D) 12.32 x 5.16 x 1.92 in (H x W x D)
Operating conditions	-25 to +55°C / -13 to 131°F Humidity 10 to 85 % RH (non-condensing)
Scope of delivery	1x Main Electrical Unit 1x Front panel 1x Nameplate for 1 call button, stainless steel, bell symbol 1x RFID key fob 1x Screwdriver 1x Quickstart guide with Digital Passport 1x Installation manual 1x Small parts
Warranty	see www.doorbird.com/warranty

CURRENT SYSTEM REQUIREMENTS

System requirements	Mobile device: Newest iOS on iPhone/iPad, newest Android on Smartphone/Tablet Internet: High-Speed Landline Broadband Internet connection, DSL, cable or fiber optic, no socks or proxy server Network: Ethernet Network, with DHCP
Recommended installation height	Camera lens should be at a min. height of 145 cm (57 in). Before the installation please determine your optimal installation height.

VIDEO

Camera	HDTV 720p, dynamic (VGA – HDTV)
Lens	High-end ultra wide-angle hemispheric lens 180° (D), 140° (H), 100° (V), straightened, IR-capable
Night-vision	Yes, light sensor, automatic IR-cut filter, 12 Infrared LEDs (850 nm)

AUDIO

Audio components	Speaker and microphone, noise reduction and echo cancellation (ANR, AEC)
Audio streaming	Two-way, full duplex

NETWORK

Ethernet	RJ45 jack, PoE 802.3af Mode-A, 10/100 Base-T
Supported protocols	HTTP, HTTPS, SSL/TLS, Bonjour, DNS, RTSP, RTP, TCP, UDP, RTCP, ICMP, DHCP, ARP, SIP, DTMF (RTP [RFC-2833], SIP INFO [RFC-2976]), STM

MOTION SENSOR

Type	Active
Detection angle	54° (H), 70° (V)
Range	1 - 10 m (3.3 - 32.9 ft), depends on environment, configurable in 1 m (3.3 ft) steps.
Technology	4D. Based on multiple integrated sensors and algorithms, e.g. Radio Frequency Energy (RFE)
Configuration	Via App, e.g. • Range (1 - 10 m / 3.3 - 32.9 ft) • Movement direction (coming, leaving, both) • Individual events (e.g. switch a relay, push notification, SIP call [audio/video], HTTP(s) notification) • Individual schedules

RFID

Type	Active Reader Passive Tag (ARPT) system
Standard	ISO/IEC 18000-2:2009 Part 2, EM4100, EM4102
Frequency	125 KHz
Range	0 - 3 cm, depends on environment
Antenna	Internal
Compatible Transponder	RFID key fobs, sold separately, see www.doorbird.com/buy Up to 200 tags manageable
Configuration	Via App, e.g. • Tag (add, delete) • Individual events (e.g. switch a relay, SIP call [audio/video], HTTP(s) notification) • Individual schedules • RFID history available for 60 minutes in the app

INTEGRATED WIRELESS MODULES

RFID	125 KHz
Sensor	24 GHz, can be disabled

THIRD-PARTY INTEGRATION (DOORBIRD CONNECT)

Partnerintegrations	see www.doorbird.com/connect
API	see www.doorbird.com/api
Simultaneous video streams	One, for event-based and continuous recording

OPTIONAL ACCESSORIES

Sold separately	• Power supply unit (mains adaptor) with 4 country-specific outlet adaptors (110 - 240 V AC to 15 V DC) – EAN 4260423867314 • Surface-mounting housing, flush-mounting housing, Protective-Hood • See www.doorbird.com/buy

Special remarks:
Assembly requires professional skills or a technician.

Front panel material thickness: 3.0 mm (0.12 in)

131 mm
5.16 in

313.00 mm
12.32 in