Fanvil
The IP Communication Expert

i20-T Door Phone

Fanvil Technology Co., Ltd

1、Description

i20-T Voice Access control is a digital IP door phone with Fanvil Voip Solutions (Broadcom chip 1190), stable and reliable. FDSP ensure voice loud and clear. Good looking , durable, easy to install, comfortable buttons, and low power consumption.

2、Basic Function

- Support G.711,G.729, etc. Codec voice intercom;
- Support SIP 2.0(RFC3261) and related RFC protocol
- Unlock function (swipe or communication)
- Visitor leave message;
- Calling indoor extension for two-way conversation;
- Software upgrading on line;
- WEB remote management of Terminal malfunction or status;

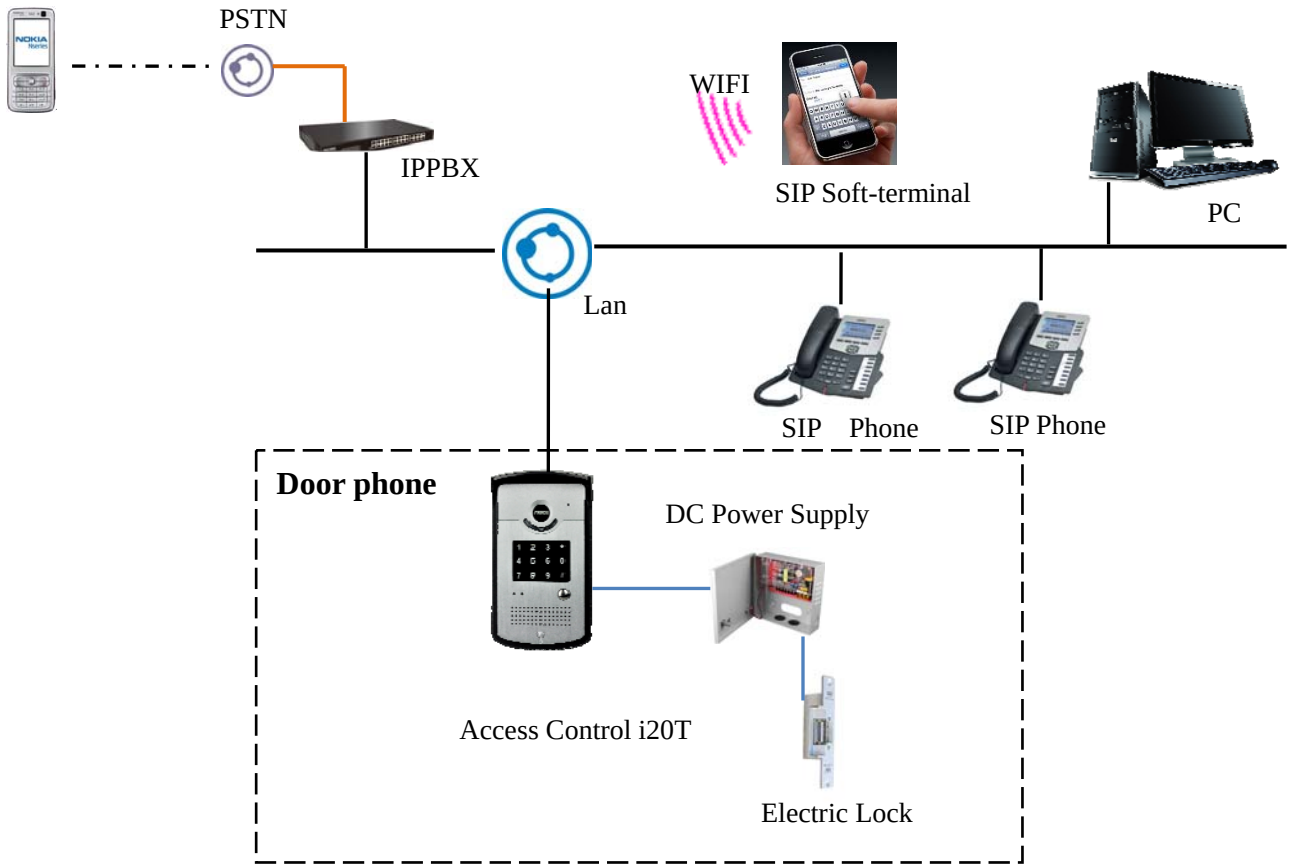
3、Specification

Communication protocol		SIP 2.0(RFC-3261)
Master Chip		Broadcom 1190
Keys	**Design**	Stainless steel
	Direct-button	1
	Numeric Keypad	Optional
Voice	**Microphone**	1
	Amplifier	1.5W
	Speaker	1.5W
	Volume Control	Adjustable
	FDSP	Support(AEC)
Voice stream	**Supportable Protocol**	RTP
	CODEC	G.711, G.729
Port	**Power Supply**	12V+-15%/1A DC or PoE
	PoE	PoE 802.3af (Class 0 - 12.95W) 48V/380mA
	LAN	10/100BASE-TX s Auto-MDIX, RJ-45）
	Cables	HSYV or better
	Passive Switch	Normally Open and Normally Closed highest at 30V/1A AC/DC
	Active Switched Output	12V/500mA DC
	RS232	Supported
RFID/IC Card	**EM-40XX (125Khz)**	Supported

Reader		
Structure	**Shell Material**	Aluminum Cover、Plastic back case
	Operating Temperature	-20°C to 70°C
	International Protection	IP53
	Working Condition **Relative Humidity**	10% - 95%
	Storage Temperature	-40°C to 70°C
	Installation	Embedded installation (pre-burying)
	Size	Overall Dimension：174.5╳96╳44mm pre-burying Mounting Dimension：148╳80╳36mm

4、Schematic Diagram

5.System CompositionDiagram



System Composition Diagram

- Web Business Management

  It is mainly used for remote management i20-T voice access device, which includes such features as the device parameter management, access control parameter settings, card, log management.

- Access Control

  Access control is consist of i20 voice access control, exclusive DC power supply and electric lock . Inside of i20-T , self-powered electric lock can directly drive the starting current of 500mA power locks; additionally you can also access exclusive external DC power supply and the voice access output control signals , to drive electric lock on and off by access exclusive DC power.

- Intercom function

  i20-T voice intercom system consists of i20- access control, SIP phones, phones installed SIP soft-terminal, IPPBX . i20-T Voice Access supports standard SIP protocol, and has good system compatibility with main IPPBX in the market.

6 、Functions

Functions			Application
Software Functions	**Intercom**	Resident voice intercom	Intercom between residents and visitors
	Open the door	Remote Door	Both Sip terminals and phones can open the door when ring or speak
		Swipe	Swipe at RF ID area, the door will be open after valid confirmation
	Timeout Handling	Calling Timeout	When calling timeout, the terminal does not answer, the I20-T Voice Access automatically hang up
		Conversation timeout	When conversation between i20 voice access and terminal is timeout, I20 automatically hang up
	Incorrect handling	Fault Tips	Equipment failure, the speaker needs to have tips
	Property management	Front Monitoring	If monitoring function activate , the user terminal can hear the voice situation of door
	Terminal Management	Query and device settings	Remote checking and setting device parameters and status via internet
		Running Log	I20-T Record device running logs
	Project maintenance	I20-T Setting function	During installation and commissioning, you can set up the device through the key parameter
	Network Access Request	Access to Internet	When equipment power on, select 2 ways to access to internet(dynamic or static IP)
		Access to IPPBX	According to user SIP account and password , Device registered on the specified IPPBX
Hardware function		Keys	Support Talkback（1 or 2 buttons）
		Numeric keypad	For the numeric keypad dialing or opening the door via password
		RFID Card reader	For swiping to open the door
		Speaker	For intercom audio, voice prompts, the alarm tone or an error, success prompt
		Microphone	Visitor’s voice input
		Door lock Controller	Control on/off of lock(Initially output switch control signal only

	Ethernet Port	Debug connection to internet and lan，support POE power-up
	Power Port	Input 12V , power supply for I20-T
	Indicator	Indicate status of I20-T Access Control
	Function Jumper	Setting output mode of door lock
	Reset	Press * (on the motherboard) button for 5 seconds to restore factory settings
	Voice Reporting No.	Press # (on the motherboard) button for 5 seconds, to start voice reporting IP function
Physical Function	Waterproof	Splashing to panel does not affect the normal operation of the system
	Operating Temperature	-20～70 Degree