



# UC2000-VF GSM/LTE VoIP Gateway

## Overview

DINSTAR UC2000-VF series GSM/LTE VoIP Gateway is a 16 channels wireless gateway based on DINSTAR new hardware platform and powerful embedded CPU, leveraging state-of-art and latest VoIP / SIP technology, which enables the smooth transit between 4G/3G/2G mobile network and VoIP networks. Supporting up to 16 concurrent calls in a single 1U box, makes it an ideal choice for users.

Moreover, with open API, it allows users to build their own application software to send SMS/USSD messages or bulk SMS messages, or push their text messages from email, HTTP etc.

It is suitable for enterprises, multi-site organizations, call centers and areas with limited landline like rural area to cut down telephony costs and enable easy & efficient communications.

## Key Features

- Up to 16 Channels GSM or LTE
- Powerful Embedded CPU
- Compatible with LTE-FDD/LTE-TDD/WCDMA/GSM Networks
- Compatible with Mainstream VoIP Platform
- Hot Swappable SIM Cards
- Voice over LTE (VoLTE)
- HTTP API for SMS Application Integration
- SMS to Email & Email to SMS
- Flexible Dial Rules & Manipulation Rules
- Auto CLIP
- Remote SIMs Management (optional)

### UC2000-VF



## Hardware Interfaces

- Mobile: 16 Channels
- SIM Card slots: 16
- Antennas Connectors: SMA
- Ethernet Interfaces:
  - 2\*10/100/1000 Base-T, RJ45
- LED Indicators:
  - Power, RUN, Channel indicator
- Console:
  - 1\* RS232 (USB-B connector)
- RST/PWR Button

## LTE Frequency Bands

- UC2000-VF-16T VoLTE gateways with several options:
  - Type A:
    - FDD: B2/B4/B12
    - WCDMA: B2/B4/B5
  - Type E:
    - FDD: B1/B3/B5/B7/B8/B20
    - TDD: B38/B40/B41
    - WCDMA: B1/B5/B8
    - GSM: 900/1800MHz
  - Type V:
    - FDD: B4/B13
  - Type J:
    - FDD: B1/B3/B8/B18/B19/B26
    - TDD: B41 WCDMA: B1/B6/B8/B19
  - Type AU:
    - FDD: B1/B2/B3/B4/B5/B7/B8/B28
    - TDD: B40
    - WCDMA: B1/B2/B5/B8
    - GSM: 850/900/1800/1900

## VoIP & Media

- Protocol: SIP v2.0, RFC3261
- SIP UDP/TCP/TLS
- RTP/SRTP
- Codecs: G.729AB, PCMU, PCMA, G.723.1
- Silence Suppression
- Comfort Noise Generator(CNG)
- Voice Activity Detection(VAD)
- Echo Cancellation
- Dynamic Jitter Buffer
- DTMF: RFC2833, SIP Info
- Call Progress Tone Generation
- Programmable Gain Control
- NAT: STUN, Dynamic NAT, Static NAT

## Mobile Features

- SMS/USSD/PIN
- Encoding: Unicode/ASCII
- HTTP API for SMS
- SMPP for SMS
- Polarity Reversal
- CID/CLIR
- SMS Send and Receive
- SMS to Email
- Email to SMS
- Auto SMS/Call Generation
- Call Waiting/Call Back
- Call Forward
- Call Conference
- GSM Audio Coding:
  - HR, FR,EFR, AMR\_FR,AMR\_HR
- Remote SIM

## Software Features

- Mobile to VoIP, VoIP to Mobile
- SIP Trunk and Trunk Group
- Caller/Called Number Manipulation Rules
- SIP Codes Mapping
- White/Black List
- PSTN Hotline
- VoIP Hotline
- Abnormal Call Monitor
- Minutes Limitation for Ports/Single Call
- Balance Check
- Low Balance Alarm
- Auto Update SIM Number
- Random Call Interval
- Auto CLIP Routing
- Signaling & RTP Encryption(DBO)
- Auto SIP Account
- OpenVPN

## Physical Features

- Power Supply: 100-240V,50-60Hz
- Power Consumption: 38w
- Temperature(Operation): 0 °C ~ 40 °C  
(Storage): -20 °C ~80 °C
- Operation Humidity: 10%-90%
- Dimension(W/D/H): 440x270x44mm
- Unit Weight: 3.7kg

## Maintenance

- Web/Telnet Configuration
- Configure Backup/Restore
- Firmware Upgrade by HTTP
- Factory Reset
- CDR (10000 CDRs Storage Locally)
- Syslog/Filelog
- Ping and Tracert
- Traffic statistics: TCP,UDP,RTP
- VoIP Call Statistics
- PSTN Call statistics: ASR,ACD,PDD
- Voice Diagnose with Loopback
- GSM Network Test
- IVR Customization
- SIP/RTP/PCM Capture
- SIMCloud Management
- Centralized Management(DMS)
- Network Management System

## Frequency Bands(2G/3G)

- UC2000-VF-16G:  
GSM Gateway: 850/900/1800/1900MHz
- UC2000-VF-16W:  
WCDMA Gateway with two options  
A: WCDMA 850/1900MHz and GSM  
850/900/1800/1900MHz;  
B: WCDMA 900/2100MHz and GSM  
900/1800MHz

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### About Us

Shenzhen Dinstar Co.,Ltd. was founded in 2011, focusing on developing, manufacturing, and marketing of Next Generation Communication and Networking products, with headquarter in Shenzhen, China and branches in Beijing, Hangzhou, Hong Kong. Now we have more than 180 specialists, most of them coming from top-rank global telecommunication enterprises, who have dedicated themselves to VoIP, unified communication and wireless mobile network etc. for more than 18 years.