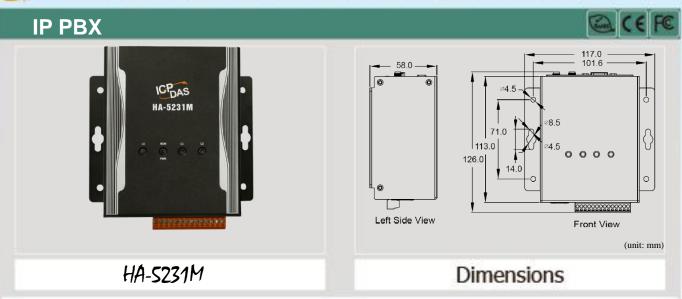


# **BA& HA Series Products**



HA-5231M is a private branch exchange (telephone switching system) that switches calls between VoIP (voice over Internet Protocol or IP) users. It allows the phones to talk to each other by voice and video. These phones can be an IP phone, software phone, the ICPDAS HA-401, SI-002 and so forth. In addition, we also provide the utility software for users to management the HA-5231M. By using this module, users can manage their SIP phone easier and more flexible.

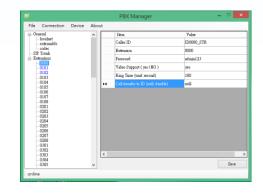
## **Features**

- VoIP Protocol: SIP (Session Initiation Protocol)
- Audio Codec: PCMU, PCMA, GSM, G722
- Video Codec: H.263p, VP8, H.264
- Support pass through video call
- Up to 256 extensions
- Up to 8 SIP trunk
- Call Detail Records
- Flexible Extension manager
- Provide network firewall functionality
- Operating Temperature:  $-25 \sim +75$ °C

#### Software Tool

PBX Manager provides quick and convenient communication with the HA-5231M. Users can easily configure HA-5231M's account, firewall, network, extensions and so forth.

- Extensions manager
- Online extensions display
- Network manager
- Call Records display



#### Appearance





Hardware Specifications

System Software	
OS	Linux Kernel 3.2.14
Embedded Service	SIP, SSH
CPU Module	
CPU	AM3354, 1 GHz
DDR3 SDRAM	512 MB
Flash	512 MB
EEPROM	64 KB
Expansion Flash Memory	microSD socket with one 4 GB microSD card (support up to 32 GB microSDHC card)
RTC (Real Time Clock)	Provide second, minute, hour, date, day of week, month, year
64-bit Hardware Serial Number	Yes, for Software Copy Protection
LED indicator	4 LEDs(PWR · RUN · L1 · L2)
Rotary Switch	Yes (0~9)
<b>Communication Ports</b>	
Ethernet	10/100 Based-T (Auto-negotiating, Auto MDI/MDI-X, LED indicators)
USB 2.0 (host)	1
Console Port	RS-232 (RxD, TxD and GND); Non-isolated
ttyO2	RS-485 (Data+, Data-); Non-isolated
ttyO4	RS-232 (RxD, TxD and GND); Non-isolated
ttyO5	RS-485 (Data+, Data-); 2500 VDC isolated
Power	
Input Range	+12 VDC ~ +48 VDC
Consumption	4.8 W
Mechanism	
Installation	DIN-Rail
Dimensions	72mm x 33mm x 119mm (W x L x H)
Environment	
Operating Temp.	-25 °C ~ +75 °C
Storage Temp.	-30 °C ~ +80°C
Humidity	10 ~ 90% RH, non-condensing

# Applications



## Ordering Information

HA-5231M CR

IP PBX (RoHS)

