Industrial AP/Client 733Mbps Dual-Band

GP-ME750 Series
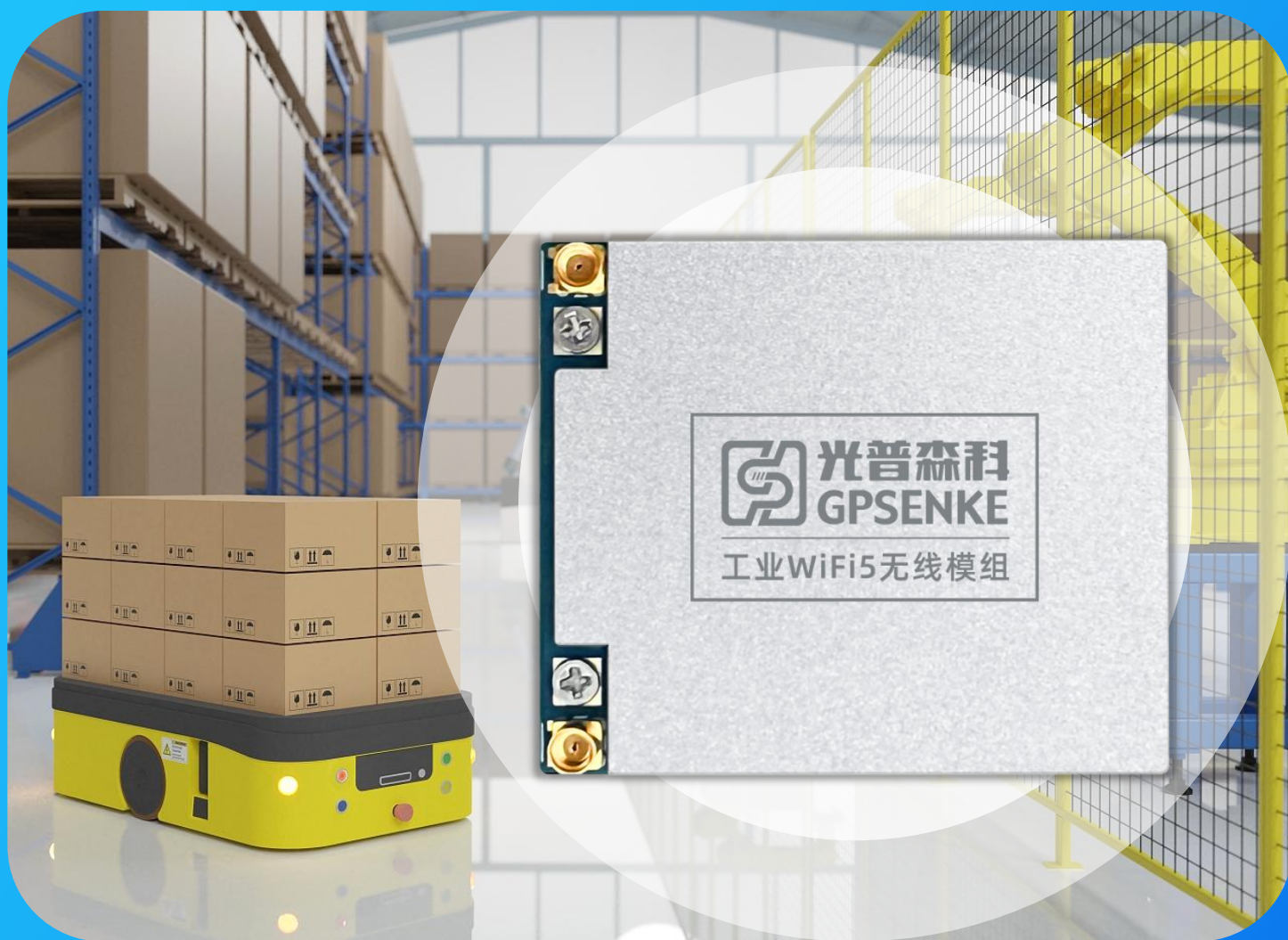
Introduction

GP-ME750 Series is a high-bandwidth, high-speed Wi-Fi 5 module. It utilizes the IEEE 802.11a/b/g/n/ac standards, supporting dual-band operation at 2.4GHz and 5GHz with data rates up to 733Mbps.

GP-ME750 Series designed with industrial-grade chipset, and uses 1.0 pitch pins to connect to other devices. It supports wireless terminal mode which can be installed on any terminal device that requires wireless network access. Combined with GPSENKE's millisecond-level GP Roaming fast roaming function, it can provide fast wireless roaming switching capabilities for mobile terminals.

GP-ME750 has an ultra-small package design and integrates the PA and the main control chip into an industrial-grade circuit design which can work in -40~80℃ environment. It can be widely used in wireless access in robot control, unmanned warehousing, power station inspection and other using sites.

Main Feature

- Support 802.11 ac standard, speed up to 733Mbps
- Support GP Roaming
- Support MAC Address Clone
- Pin Row Design
- Support IPv4/IPv6
- Support Open System, Shared Key, WPA, WPA-PSK, WPA2-Enterprise, WPA2-PSK
- Support DC3.3v Power Supply

Software Parameter

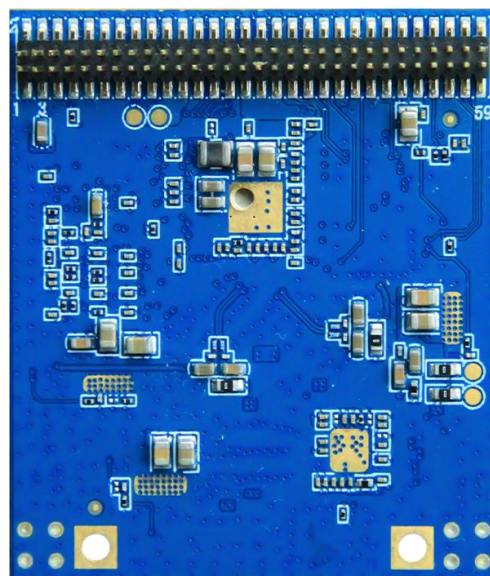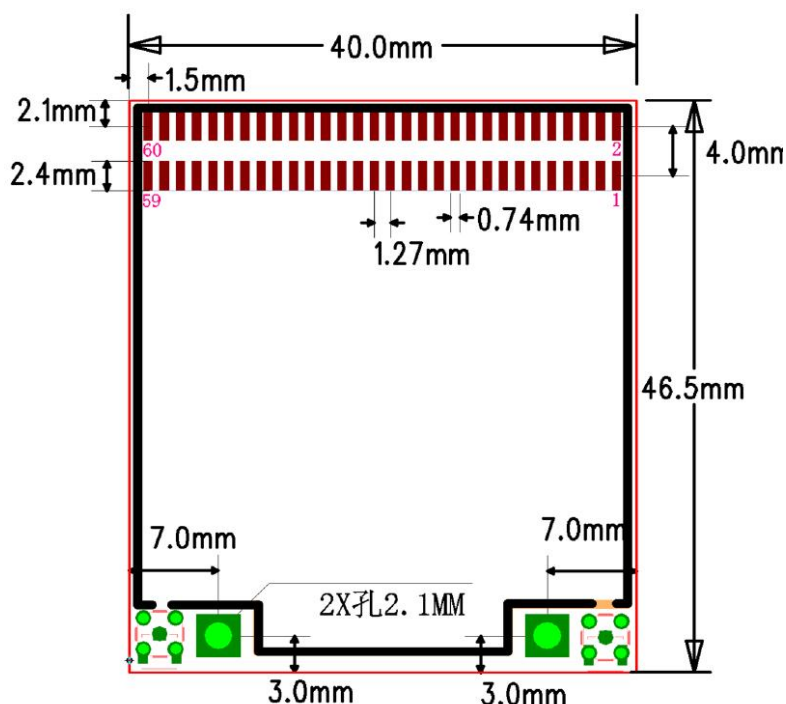|			
WLAN	Frequency Band	2.4GHz	5GHz
	Channel Bonding	40MHz (Not Recommend)	80MHz
	433Mbps(PHY)	NA	Support
	300Mbps(PHY)	Support	NA
	A-MPDU	Support	Support
	MLD	Support	Support
	MRC	Support	Support
	STBC	Support	Support
	LDPC	Support	Support
	MAX Virtual AP	Single Band-- Support 16 Virtual AP	
	Max Access Users	128 (Influenced by Environment Fators)	
	Max Access Spend	2.4GHz: 300Mbps 5GHz: 433Mbps	
	RTS/CTS	Support	
	CTS-to-self	Support	
	Hidden SSID	Support	
	Terminal Aging/Heartbeat Detection	Support	
Working Mode	AP Mode	Brigde Mode (LAY2) Router Mode (LAY3)	
	Client Mode	Client Mode MAC Address Clone	
	Bridge Mode	WDS Bridge Mode	
Roaming	Roaming Switch	Support 802.11k, 802.11v, 802.11r	
		LAY2/LAY3 Roaming	
RF	Load Balancing	Load balancing is supported based on the number of users and user traffic	
	5G Priority	Support	
	Automatic Channel Selection	Support	
	Automatic Power Regulation	Support	
	Intelligent Speed Select	Support	
	Time Fair Scheduling	Support	

Security	Encryption	Support 64/128 bit WEP、Dynamic WEP、TKIP、CCMP encryption
	Authentication Method	Cooperate With AC Support WPA、WPA-PSK、WPA2- Enterprise、WPA2-PSK、WPA3、MAC address Verify、Web Verify、PPPoE Verification and etc Methods
	LAY2 Isolation of Wireless Users	Support
	wIDS	Support
AAA	RadiusClient	Support
	Authentication Server Multi-domain configuration	Support
	Authentication Server Backup	Support
LAY2/LAY3	IP Address	Static IP and DHCP dynamically obtain addresses
	IPv6	Support
	ACL	Support
	DHCP server	Support (Router Mode)
	NAT	Support (Router Mode)
Service Quality	WMM(802.11e)	Support
	Priority Mapping	Support
	QoS Policy Mapping	Support
	Bandwidth Managed	Support Bandwidth Speed Limitation based on SSID and Users
	Call Admission Control（CAC）	Support
Maintenance	Network Management	SNMPV1/V2c/V3、Trap、Telnet、FTP/TFTP、WEB

Hardware Parameter

Size		40*46.5 mm
Port	Ethernet	4×10/100/1000M Ethernet PIN Port
	Antenna	2×MMCX IPEX Port （External-Antenna Optional）
Working Band	2.4G	802.11 n/g/b: 2.4GHz-2.483GHz (CHINA)
	5G	802.11 ac/n/a: 5.150GHz-5.350GHz 5.725GHz-5.850GHz (CHINA)

Modulation Technology	OFDM： BPSK@6/9Mbps、QPSK@12/18Mbps、16-QAM@24Mbps、64-QAM@48/54Mbps DSSS : DBPSK@1Mbps、DQPSK@2Mbps、CCK@5.5/11Mbps MIMO-OFDM （11n）: MCS 0-15 MIMO-OFDM （11ac）: MCS 0-9
Modulation Method	11b： DSS:CCK@5.5/11Mbps,DQPSK@2Mbps,DBPSK@1Mbps 11a/g OFDM:64QAM@48/54Mbps,16QAM@24Mbps, QPSK@12/18Mbps,BPSK@6/9Mbps 11n： MIMO-OFDM:BPSK,QPSK,16QAM,64QAM 11ac/ac wave2： MIMO-OFDM:BPSK,QPSK,16QAM,64QAM,256QAM
MAX Transmit Power	27dBm
Adjustable Granularity	1dBm
Operating Temperature	-40℃ ～ 75℃
Storage Temperature	-40℃ ～ 85℃
Operating Humidity	5%~95%(Non-condensing)
Power Supply	DC3.3V Power Supply
Consumption(Client5.8G)	AP Mode : ≤ 10W Client Mode :2.4G ≤ 9W 5.8G ≤ 6W
MTBF	>250000H

Product Design

INDUSTRIAL NETWORK
SOLUTION SPECIALIST

GPSENKE