ISPAIR 54Mb CPE 500 Series

ISPAIR 54Mb CPE 500 series are used to provide internet access to end-users using point-to-multipoint architecture at 54Mbps in 2.4GHz and 5GHz unlicensed band. Wireless data links take place where there is no infrastructure for internet access or in places where bandwidth offered by current channels is too low. With our wireless equipment you can get high bandwidth on very long distances at a very reasonable price. Our equipment provides various features including Routing, Firewall NAT, DHCP, bandwidth control and many more.
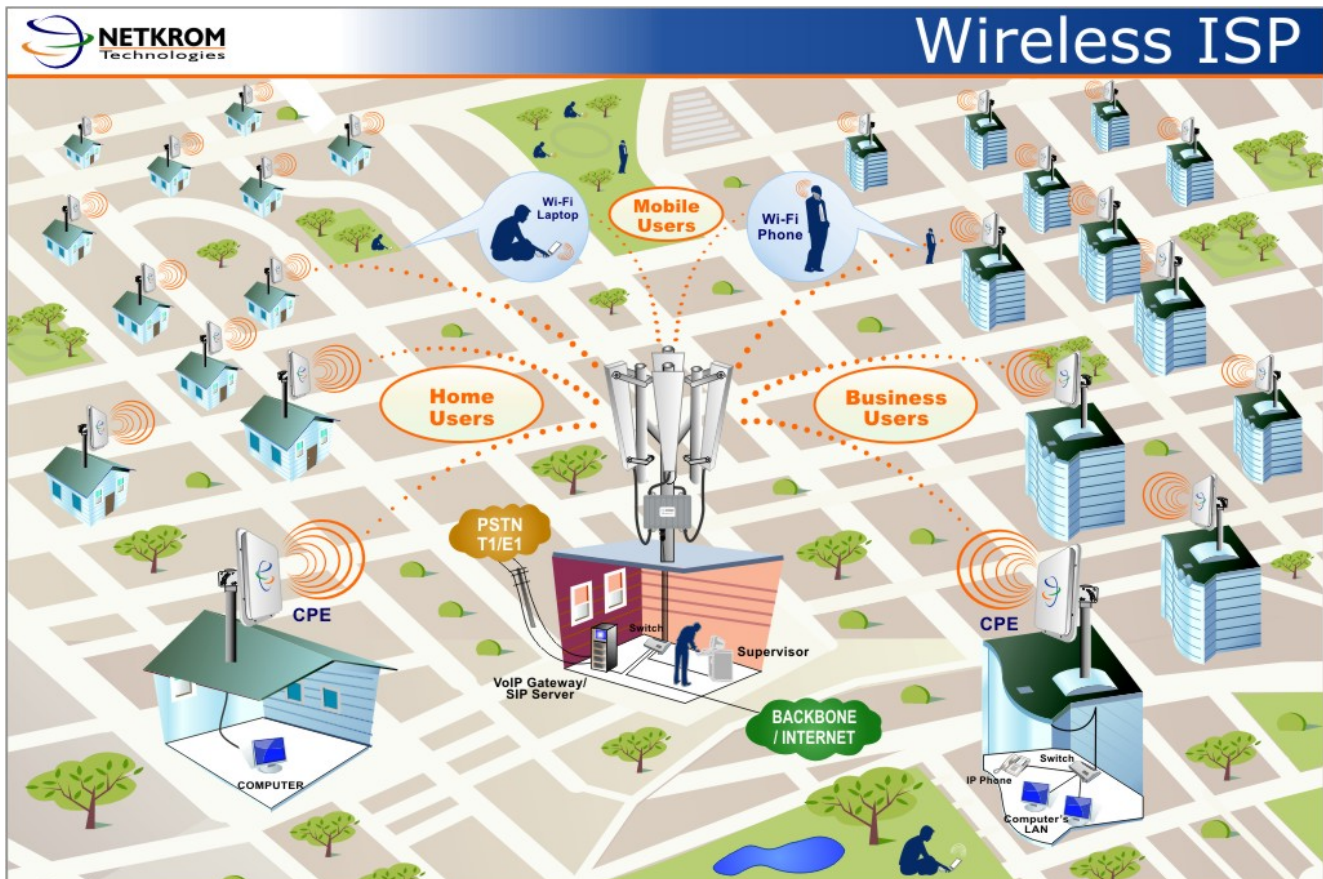
The Client CPE with Integrated Antenna is the most comprehensive wireless solution, which includes powerful wireless router with Power over Ethernet (PoE) feature, all embedded in high-gain directional antenna. Flat Panel Antenna offers wide territorial coverage with no signal waste and the Power over Ethernet injector provides the possibility to deliver both necessary power and data to your router (which is attached to the antennas) over a single Ethernet cable.

Features:

- Cost effective solution
- Complete Outdoor Weatherproof Solution
- All-in-One Wireless CPE device
- Integrated Power over Ethernet
- Web Management and SNMP support
- High-speed wireless data links (Up to 54Mbps)
- Connection distance up to 20 miles (32km)

- Firewall, NAT, IP Routing, DHCP
- Bandwidth control
- High level security with full 64/128Bit WEP Encryption
- Atheros XR Chipset - Advanced long-range features
- WDS - Wireless Distribution System
- Antenna Alignment and Wireless Site Survey
- Fast and simple installation for base station and Clients

Applications:

2.4GHz CPE Specifications:

Model	ISP-CPE500G	ISP-CPE500GHP	ISP-CPE500GUHP
Ethernet Port	10/100Base-TX (RJ-45)		
Operating Frequency / Channel	2.412 ~ 2.462GHz (FCC -US) 2.412 ~ 2.472 (ETSI - EU) 2.412 ~ 2.484 (TELEC - JAPAN) Programmable for different country regulations		
RF Modulation	**802.11b**: DSSS (BPSK, QPSK, CCK) **802.11g**: OFDM (BPSK,QPSK, 16-QAM, 64-QAM)		
RF Output Power	20dBm at Radio 35dBm at EIRP	23dBm at Radio 42dBm at EIRP	26dBm at Radio 45dBm at EIRP
Sensitivity	-90dBm@6Mb -70dBm@54Mb		
Data Rate	54, 48, 36, 24, 18, 12, 11, 5.5, 2, 1Mbps		
RF Operation Mode	Access Point Client mode Point to Point Point to Multiple Point Wireless Routing Client Wireless Adapter Gateway		
Range	5 miles (8 Km)	15 miles (24 Km)	20 miles (32 Km)
Data Security	WEP 64/128/152 - bit Mac Address Filtering IEEE 802.1x—TLS, TTLS, PEAP WPA-PSK and WPA-EAP, WPA2 (with AES encryption technique)		
Network Advanced Features	IP Routing - static Routing, NAT and Port Forwarding (Wireless Routing Client and Gateway mode only) WDS - Wireless Distribution System PPPoE Client (Wireless Routing Client and Gateway mode only) PPTP for VPNs Network 802.1d Spanning Tree Protocol SNMP support DHCP Server and Client Bandwidth Control Pseudo VLAN technology Proprietary Long Distance Algorithm for ACK and CTS timeout adjustment support Firewall and Packet/URL Filtering (Wireless Routing Client and Gateway mode only) Load Balancing & Fail-Over Redundancy (Gateway mode only)		
Link parameters	Antenna alignment and RSSI Signal levels Site Survey Radio and Ethernet Traffic Statistics		
Management	Web and utility Windows based		
Power	Power over Ethernet – PoE 802.3af (AC 110~220/DC 48V) with surge protector		
Dimensions	10.75" x 10.75" x 2.6" in 267x267x67mm)	18.5"x16.8"x2.5" in (470x 427x64mm)	
Weight	4 Lb (1.8 Kg) complete set	6 Lb (2.7 Kg) complete set	
Cable	50", 100", 150", or 200" length Outdoor CAT5E Rated Shielded Cable (Optional)		
Humidity	-10-90%, (Operating)		
Temperature	-40 to 167 Deg F (-40 to 75 Deg C)		
Compliant	FCC Part 15 class B, CE Mark, ETSI 300 328		
Antenna Characteristics			
Gain	15 dBi	19 dBi	
Frequency Range	2400 – 2500 MHz		
3db Beam Angle (E-Plane)	30 Deg	15 Deg	
3dB Beam Angle (H-Plane)	30 Deg	20 Deg	
Polarization	Horizontal or Vertical		

2.4GHz CPE Ordering Information:

- **ISP-CPE500G** — ISPAIR 54Mb 2.4GHz 802.11b/g CPE short range subscriber 5 miles - 8Km (Antenna, Radio and Router in one!)
- **ISP-CPE500GHP** — ISPAIR 54Mb 2.4GHz 802.11b/g CPE long range subscriber 15 miles - 24Km (Antenna, Radio and Router in one!)
- **ISP-CPE500GUHP** — ISPAIR 54Mb 2.4GHz 802.11b/g CPE ultra long range subscriber 20 miles - 32Km (Antenna, Radio and Router in one!)

5GHz CPE Specifications:

Model	ISP-CPE500A	ISP-CPE500AHP	ISP-CPE500AUHP
Ethernet Port	10/100Base-TX (RJ-45)		
Operating Frequency / Channel	5.15~5.35 & 5.725~5.850 GHz (FCC - US) 5.15~5.35GHz & 5.47~5.725GHz (ETSI - EU) 5.15~5.25GHz (TELEC - JAPAN) Programmable for different country regulations		
RF Modulation	**802.11a:** OFDM (BPSK,QPSK, 16-QAM, 64-QAM)		
RF Output Power	18dBm at Radio 37dBm at EIRP	23dBm at Radio 47dBm at EIRP	26dBm at Radio 50dBm at EIRP
Sensitivity	-90dBm@6Mb -70dBm@54Mb		
Data Rate	54, 48, 36, 24, 18, 12, 11, 5.5, 2, 1Mbps		
RF Operation Mode	Access Point / Client mode Point to Point / Point to Multiple Point Wireless Routing Client Wireless Adapter / Gateway		
Range	5 miles (8 Km)	15miles (24 Km)	20 miles (32Km)
Data Security	WEP 64/128/152 - bit Mac Address Filtering IEEE 802.1x—TLS, TTLS, PEAP WPA-PSK and WPA-EAP, WPA2 (with AES encryption technique)		
Network Advanced Features	IP Routing - static Routing, NAT and Port Forwarding (Wireless Routing Client and Gateway mode only) WDS - Wireless Distribution System PPPoE Client (Wireless Routing Client and Gateway mode only) PPTP for VPNs Network 802.1d Spanning Tree Protocol SNMP support DHCP Server and Client Bandwidth Control Pseudo VLAN technology Proprietary Long Distance Algorithm for ACK and CTS timeout adjustment support Firewall and Packet/URL Filtering (Wireless Routing Client and Gateway mode only) Load Balancing & Fail-Over Redundancy (Gateway mode only)		
Link parameters	Antenna alignment and RSSI Signal levels Site Survey Radio and Ethernet Traffic Statistics		
Management	Web and utility Windows based		
Power	Power over Ethernet – PoE 802.3af (AC 110~220/DC 48V) with surge protector		
Dimensions	10.75"x10.75"x2.6" in (267x267x67 mm)	8.5"x16.8"x2.5" in (470x 427x64mm)	
Weight	4 Lb (1.8 Kg) complete set	6 Lb (2.7 Kg) complete set	
Cable	50", 100", 150", or 200" length Outdoor CAT5E Rated Shielded Cable (Optional)		
Humidity	-10-90%, (Operating)		
Temperature	-40 to 167 Deg F (-40 to 75 Deg C)		
compliant	FCC Part 15 class B, CE Mark, ETSI 300 328		

Antenna Characteristics

Gain	19 dBi	24 dBi	
Frequency Range	5150 – 5850 MHz		
3db Beam Angle (E-Plane)	15 Deg	9 Deg	
3dB Beam Angle (H-Plane)	15 Deg	9 Deg	
Polarization	Horizontal or Vertical		

5GHz CPE Ordering Information:

- **ISP-CPE500A** — ISPAIR 54Mb 802.11a 5GHz CPE short range subscriber 5 miles - 8Km (antenna and Radio in one!)
- **ISP-CPE500AHP** — ISPAIR 54Mb 802.11a 5GHz CPE long range subscriber 15 miles - 24Km (antenna and Radio in one!)
- **ISP-CPE500AUHP** — ISPAIR 54Mb 802.11a 5GHz CPE ultra long range subscriber 20 miles - 32Km (antenna and Radio in one!)

WiMAX FORUM

WE PROTECT YOUR INVESTMENT: WiMAX and 801.11n Support

As a company focused exclusively on Wireless data transmission, Netkrom is committed to long-term product planning, backwards compatibility and the integration of new technologies that will allow it to support traditional enterprise markets.