

## ST-5801 Professional outdoor wireless digital bridge transmission equipment 30KM



### Features:

- ◆ Support standard IEEE 802.11a.
- ◆ Support 1-108Mbps data transfer rate,
- ◆ Used for not be wired for network expansion or coverage of business, school or remote areas, access to LAN or Internet network.
- ◆ Support "point" and "multipoint" the connection.
- ◆ To obtain further protection, bridges, and Ethernet interface adapters have lightning protection.
- ◆ Data transmission options : IEEE 802.11a and IEEE 802.11a turbo. Under IEEE 802.11a mode, support for 6-54Mbps data transfer, the IEEE 802.11a turbo mode to support 12-108Mbps data transfer rate.
- ◆ In a safe setting, we offer two models, one for the "shared key" and another for the "exclusive key."
- ◆ Support large-scale wireless backbone transmission , accord with IP68 protection class,
- ◆ Working temperature of  $-30^{\circ}\text{C} \sim 70^{\circ}\text{C}$ .
- ◆ In open air conditions, it can transfer more than 30KM distance
- ◆ Built-in design of automatic monitoring network run watchdog that can automatically handle network events, the network will not storm off the network mesh.
- ◆ Built-in support for video multicast capabilities to support the tree branch processing protocol, to avoid network loops, support 1 point to 16 point transmission.
- ◆ With external high gain dish antenna or external the angle flat antenna ;

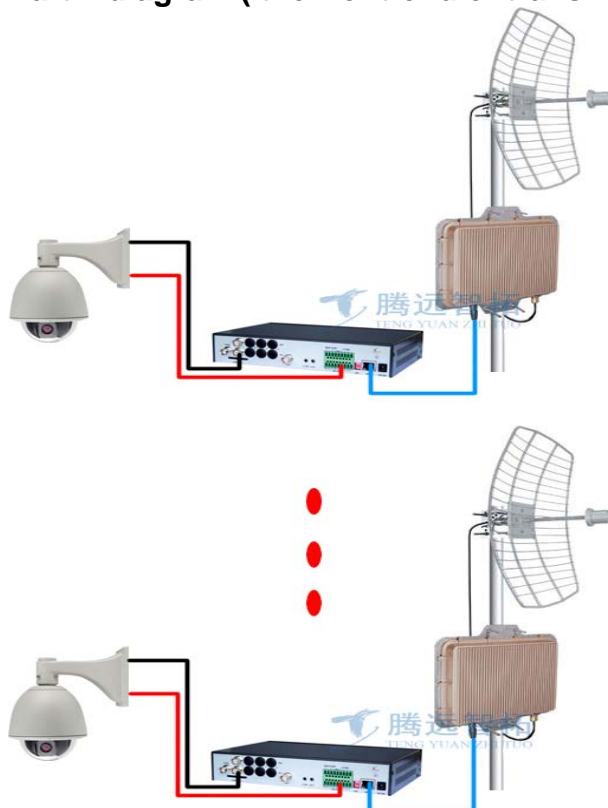
## AP Specification

Standards Compliance	IEEE 802.11a IEEE 802.3 IEEE 802.3u
SDRAM	32 Mbyte
Flash	8 M Byte
Radio Frequency Type	DSSS / OFDM
Modulation	OFDM with BPSK, QPSK, 16QAM, 64QAM
Frequency Band	5.15~5.35GHz 5.50~5.70GHz 5.725~5.850GHz
Transmission Power	Up to 200mW ,25dbm (software provisionable)
Transmission Rate	108(Turbo mode)/54/48/36/24/18/12/9/6Mbps auto fallback
Access Point Interfaces	Auto sensing MDI/ MDI-X Ethernet 10/100 Base-TX; RJ-45
Sensitivity	6Mbps: -88dBm; 9Mbps: -87dBm; 12Mbps: -86dBm; 18Mbps: -84dBm; 24Mbps: -81dBm; 36Mbps: -76dBm; 48Mbps: -72dBm; 54Mbps: -68dBm; 108Mbps: -64dBm
Antenna Type	External high gain antenna
Security Systems	64-bit/128-bit/152-bit WEP encryption
Wireless Setting	Operation Mode - Wireless Bridge PtP and PtMP Wireless Mode - 11a/ Turbo A
Software/Firmware	Support DFS and TPC SNMP network management interface FTP Windows "IpDiscover" program to help find IP Web-based configuration via popular browser (MS IE, Netscape...) Firmware upgrade and configuration backup via Web
Operating Environment	Operating Temperature: -30 ~ +70°C
Power	DC 48 V $\pm$ 5%; 1.37A (Max.); AC adapter 100V ~ 240V
Regulatory Approval	FCC Part 15 B (US); CE
Network Management System OS Support	Windows 2000/XP
Warranty	One year limited

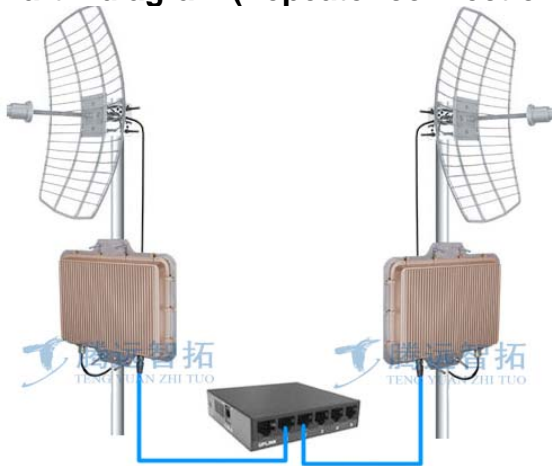
## Applications point and diagram:

- Temperature : The wireless bridge section working temperature range: -30 ° C-70 ° C. If the temperature outside this range may cause the wireless bridge does not work.
- Wind speed - wireless bridge to normal work of the wind speed range :0-90MPH, if the wind speed up to 125MPH have been resistant also. Therefore, you must consider the largest known installation point of wind and wind direction, and the installation point should be such as: poles, posts or towers like the mounting bracket.
- Lightning - wireless bridge products, this section includes built-in lightning protection device, but you must ensure that equipment, mounting bracket, cables are fully grounded.
- Transmission range – this professional long distance wireless bridge for the remote transmission , the data in the basic mode, the transmission range of 0-30 km, in Turbo mode, the transmission range of 0-14 km.
- Rain-proof : Waterproof design , it can good work with long time rain ,also did not affect the signal transmission quality. But you may need to use the seal with Ethernet interface, once the moisture into the interface will reduce the product's performance or even the bridge does not work.
- Products and Accessories
  - A. ST 5801A master / slave bridge
  - B. CAT 5/25M-RJ45 (PoE Cable)
  - C. DC power supply / RJ45 (RJ45DI-48)
  - D. N-Type to N-Type RG-400/1.5M cable
  - E. AC / DC power cord (DC48V 1.37A)

### Part 1 diagram ( the front-end of transmit ) :



Part 2 diagram ( repeater connection ) :



Part 3 diagram ( the back-end of control room/ control centre ) :

