

DH-PFM880/881

5.8G Wireless video transmission device



DH-PFM880



DH-PFM881

Features

- Support outdoor temperature: $-30^{\circ}\text{C} \sim 70^{\circ}\text{C}$, industrial design.
- Wireless coverage recommended range $\leq 3\text{km}$, max 5km
- Radio-frequency mouth anti-thunder reaches 15KV ESD
- Support auto ranging function, real time display straight line distance between client and base station.
- Support device auto reboot function
- 5G mode support 4920~6100Mhz

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- Support flow control, effectively control base station/client input/output flow control
- Support VLAN partition, realize virtual local network function, control broadcast storm
- Support 802.1x authentication method, effectively guarantee client access control, provide access safety.
- Support client priority setting, better dispatch each client when the mode is point-to-multipoint
- Support multiple channel option (5M/10M/20M/40M), effectively improve anti-interference and penetration capability

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Specifications

Type	Item	DH-PFM880	DH-PFM881
Wireless Technology	Standard	IEEE802.11 a/n	
	Working Frequency	USA(FCC): 5.725~5.825 GHz ISM band	
		ETSI: 5.15~5.35 GHz; 5470~5725 MHz ISM band	
	Modulation Mode	802.11 a/n: OFDM	
	Antenna	External antenna: gain 16dBi	Built-in antenna: gain 15dBi
	Equivalent Output Power	+27dBm(@MCS0,11n)	+23dBm(@MCS0,11n)
	Receiving Sensitivity	-74dBm @ 65Mbps, -96dBm@1Mbps	
	Optimal Transmission Distance	0-3KM	0-5KM
	Working Frequency Band	5470-5825 MHz	
	Wireless Authentication	SRRC	
	Wireless Direction Angle	Horizontal 90° , vertical 12°	Horizontal 40° , vertical 15°
	Transmission Rate	11n:13.5/15/27/30/40.5/45/54/60/81/90/108/120/121.5/135/150/162/180/216/240/270/300Mbps (40+MHz Channel width)	
11n : 130/117/104/78/65/58.5/52/39/26/19.5/13/6.5Mbps (20+MHz Channel width)			
11a : 54/48/36/24/18/12/9/6Mbps(self-adaption)			
Hardware	Power Module Port	1*POE RJ45(IN: 220V, OUT: 24V/0.5A)、1*LAN RJ45	
	Power Consumption	MAX 10W	MAX 8W
	Port	1*POE RJ45	1*POE RJ45、1*LAN RJ45
	Indicator Light	N/A	Wi-Fi status indicator light / LAN port indicator light / Power indicator light / Signal intensity indicator light
	Working Temperature	-30℃~+70℃	
	Storage Temperature	-30℃~+80℃	
	Working Humidity	5%~95%RH(no condensation)	
	Equipment Dimension(mm)	265×265×66mm	270×83×50mm
	Antenna Dimension(mm)	450×140×50 mm	N/A

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	Equipment Weight	2.1Kg	0.4Kg	
	Antenna Weight	0.8Kg	N/A	
	Protection Level	IP66	N/A	
	Mast Diameter	40mm~60mm		
Software	Encryption Way	WEP/WPA-PSK/WPA2/CCMP(AES)/TKIP		
	Network Mode	Route/Network Bridge		
	Working Mode	Access Point/Client/WDS AP/WDS client/WDS Repeater		
	Security Mechanism	IP/MAC address filtering, hide network name and etc		
	Network Protocol	TCP/UDP/ARP/ICMP/DHCP/HTTP/NTP		
	TDMA Enhancement	Support (TDMA eliminate hidden nodes influence and greatly improve one-to-many performance)		
	Auto ACK timing Adjustment	Support (Auto optimize parameter within long-distance communication and make the performance optimal)		
	Management and Log	NTP, SNMP, Syslog, Telnet		
	Webpage Configuration Management	Support webpage configuration		
	Firmware Update	Support Firmware webpage update		
	Long-Distance Communication Throughput Rate	≤40Mbps@3km	≤30Mbps@5km	
	Bandwidth Flexible Configuration	5M/10M/20M/40MHz		

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Networking Mode

Point-to-Point Networking

For point-to-point communication, generally a DH-PFM880 (or DH-PFM881) is set as access point, and the other DH-PFM881 is set as client, see Figure1-1 for more information.

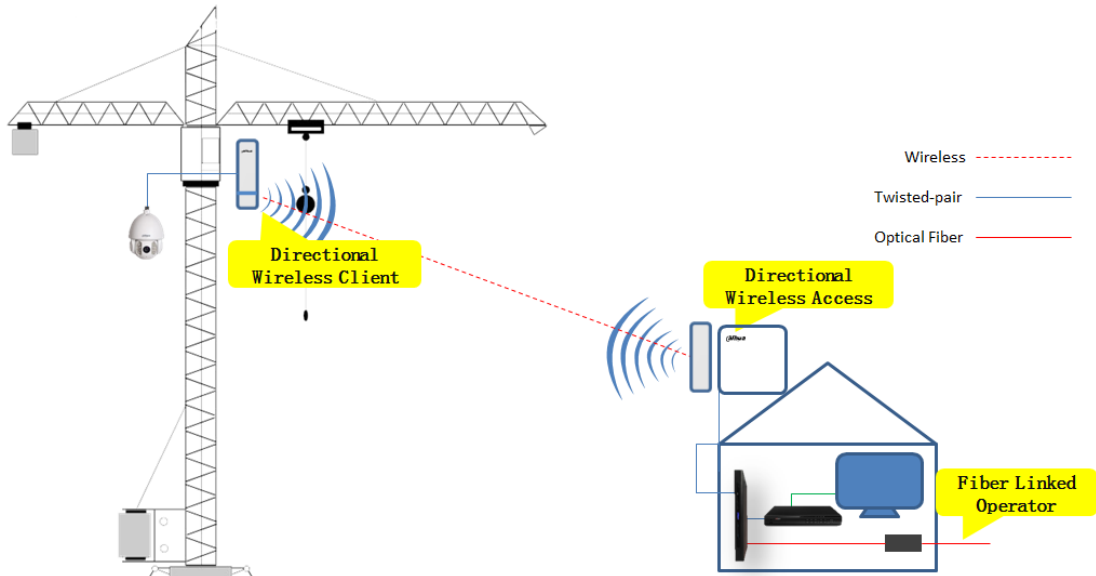


Figure 1-1

Point-to-Multipoint Networking

For point-to-multipoint communication, generally adopt device DH-PFM880 as server, and it is set as access point (different "frequency/channel" should be set when there are several access points in order to prevent interference), DH-PFM881 (or DH-PFM880) device is set as client, see Figure 1-2 for more information.

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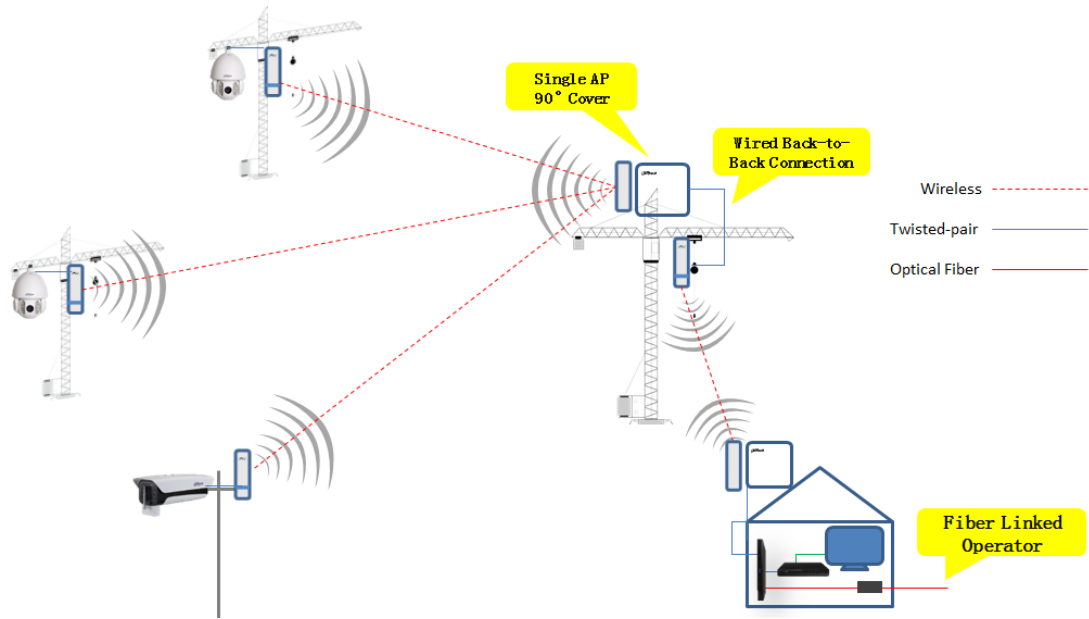


Figure 1-2

Back-to-Back Angle Adjustment Network

For wireless coverage blind angle, cable connection for double devices is recommended, which can solve the problem of angle by adjusting two directions respectively; the back-to-back connection for double devices can also be applied to long-distance repeater, see Figure 1-3 for more information.

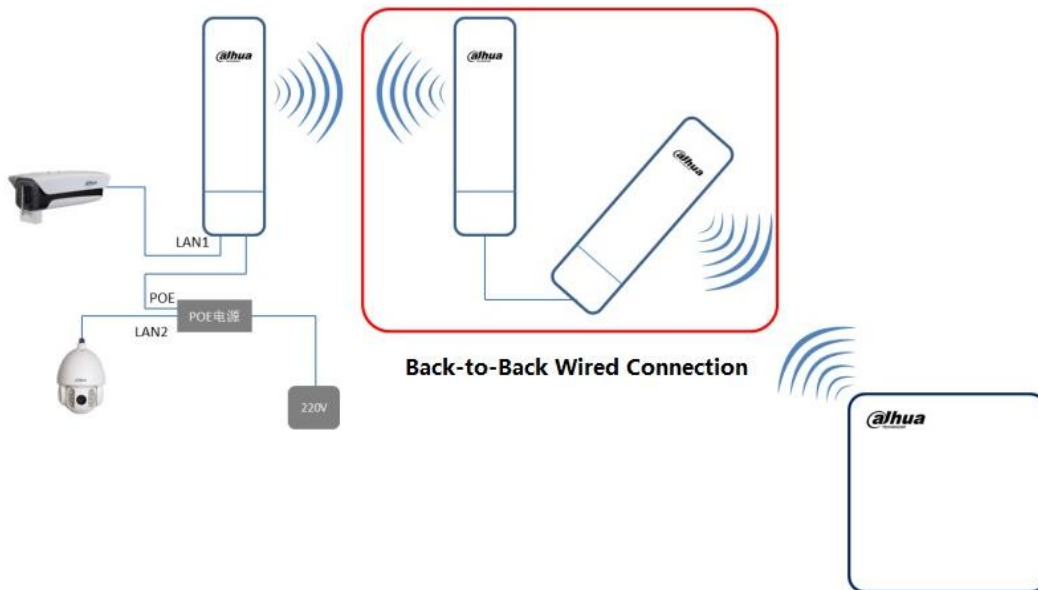


Figure 1-3

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Integrated Wireless Coverage Networking

In the actual project, we may use point-to-point, point-to-multipoint, repeater between point-to-point, direction adjustment and several other ways of integrated application at the same. The following Figure 1-4 can show you how to achieve the final demand.

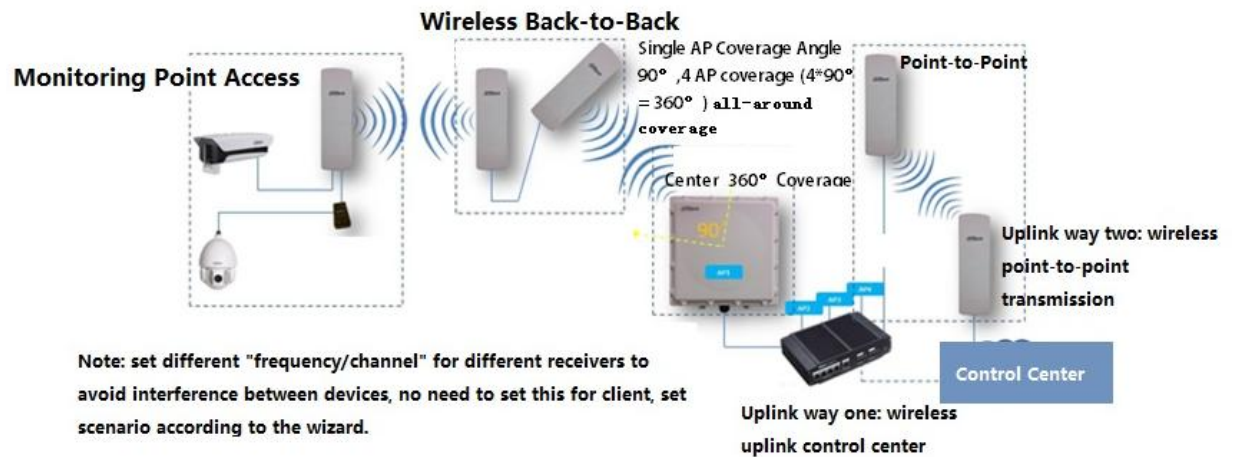


Figure 1-4

Application Scenarios

1. Safe towns, safe construction sites, safe scenic area
2. Playground, ranch, uptown crossroad and other no blocking scenarios.