勁電科技有限公司 IO-Power Technology Co., Ltd 台灣 30055 新竹市北區金竹路 100 號 1 樓 1F,No.100, Jinzhu Rd., North Dist., Hsinchu City 30055, Taiwan
http://www.io-power.com http://www.io-power.com.tw e-mail: io-power@io-power.com.tw Tel: +886 3 5429395 Fax: +886 3 5357297

Integration and application of wireless sky network transmission systems such as "safety monitoring", "emergency call for help", "AI hazard identification" around the campus

1、『Geographic Environment of Campus and Surrounding Public Facilities』map and various system integration application requirements

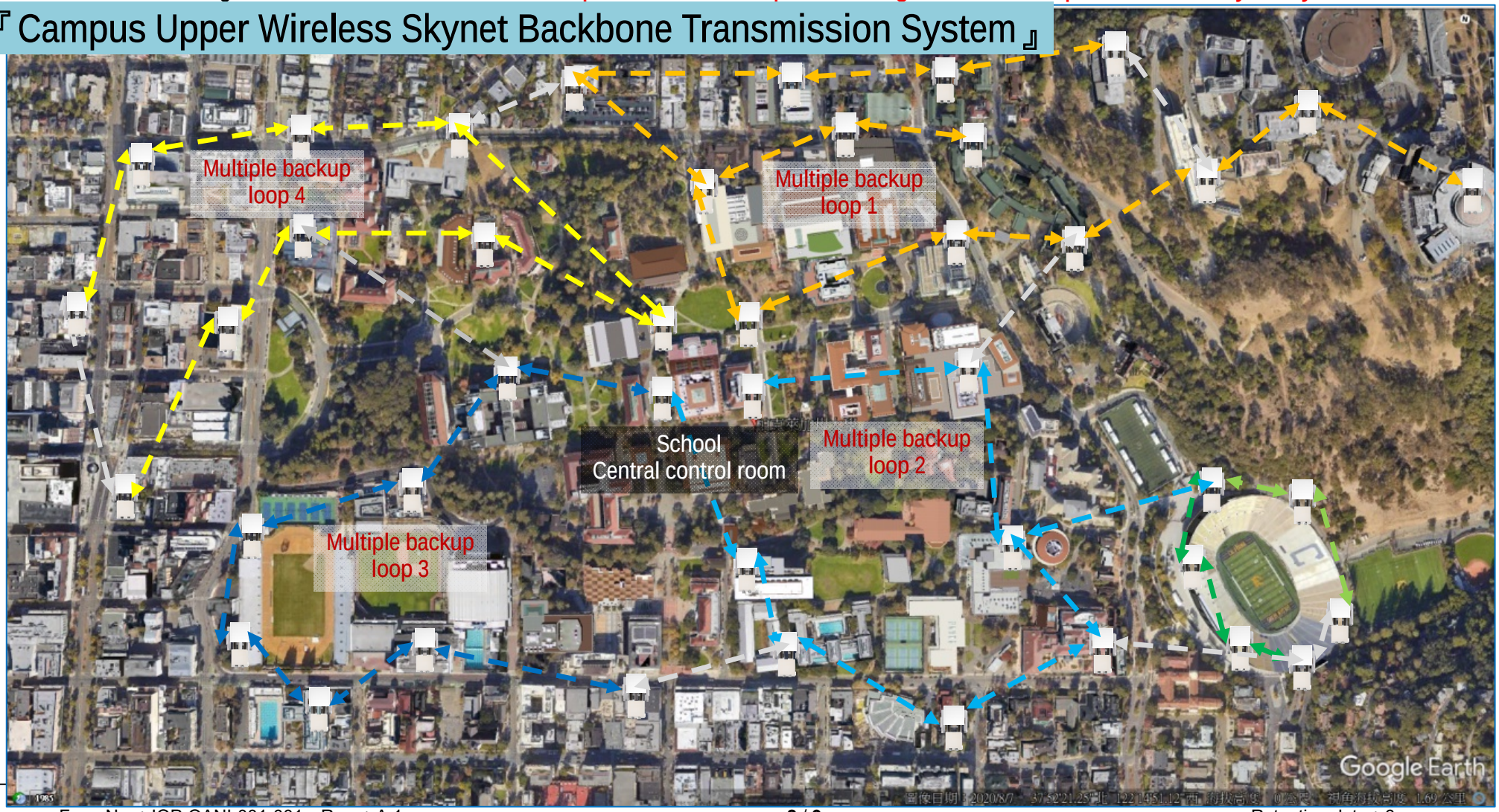
- System application: A. Surrounding campus safety video monitoring B. Campus emergency rescue image conversation system C. AI various dangerous event identification notification system D. Campus wireless Internet signal coverage E. Campus emergency backup communication connection system F .Easy to expand wireless skynet architecture...etc.

2、『PTP Mesh Loops backup』 / 『MESH network』 wireless backbone transmission 『Campus wireless Skynet system』 design

■ (This design solution) PTP Mesh multi-point Hops platform wireless backbone transmission technology explanation

A. It can support more than 20 consecutive Hops jumps. B. Each step reduces the transmission bandwidth by 10~20Mbps. C. Continuous Hops jumps 12 times, and can still maintain a bandwidth of more than 200Mbps. D. Each Hops about 2-4ms latency E. It is advisable to control the wireless connection signal at -40~-60dBm F. Use the top floor of the campus building to form a campus wireless Skynet system

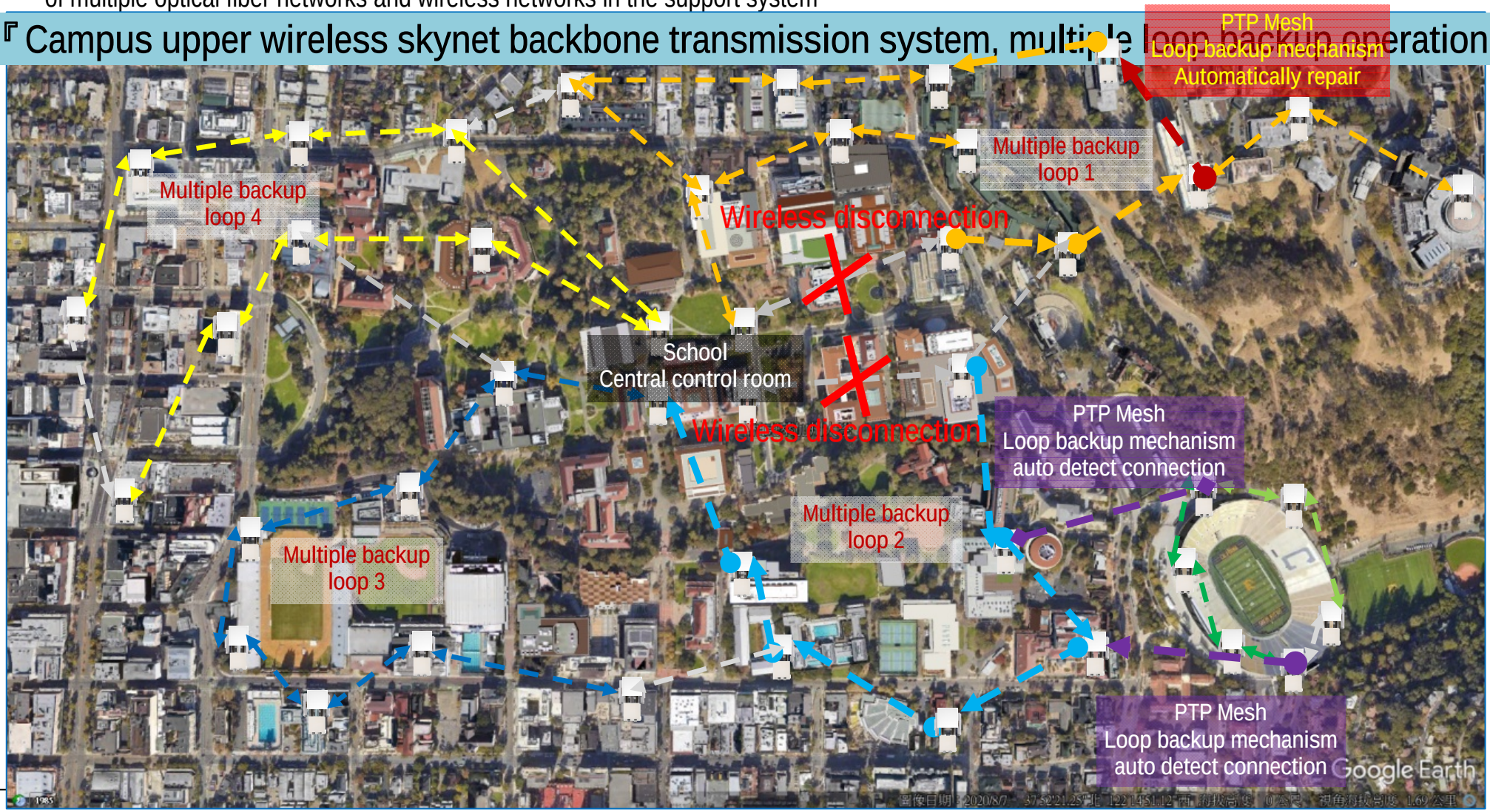
『Campus Upper Wireless Skynet Backbone Transmission System』



3、 Explanation of『Campus Wireless Skynet Backbone Transmission Backup Operation』of『Multiple Loops Backup Repair System』

■ Multiple loop repair judgment mechanism: A. Automatically detect the connection status of multiple loops in the whole system B. Judgment switching connection path according to the decrease of the connection signal value RSSI C. Judging the activation of backup according to the stability of the connection success report D. Switching connection The line path takes about 20 to 120 seconds to complete F. The backup of multiple optical fiber networks and wireless networks in the support system

『Campus upper wireless skynet backbone transmission system, multiple loop backup operation』



勁電科技有限公司 IO-Power Technology Co., Ltd 台灣 30055 新竹市北區金竹路 100 號 1 樓 1F,No.100, Jinzhu Rd., North Dist., Hsinchu City 30055, Taiwan
http://www.io-power.com http://www.io-power.com.tw e-mail: io-power@io-power.com.tw Tel: +886 3 5429395 Fax: +886 3 5357297

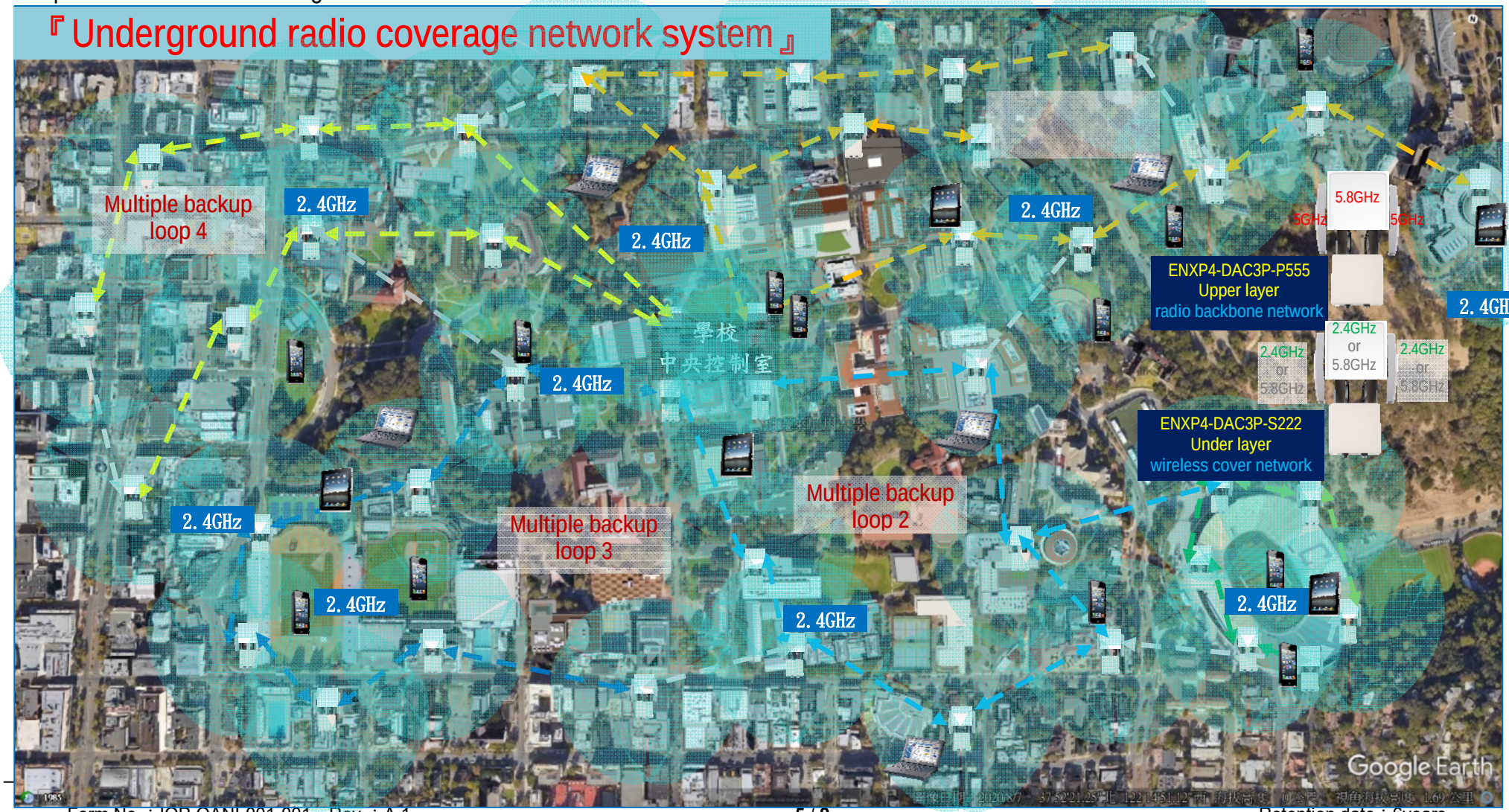
4、 Design explanation of『Campus Temporary Emergency Network Wireless Signal Coverage』of『Campus Wireless Skynet Backbone Transmission System』

■ Responding to campus temporary emergency networking needs: A. Use dedicated 5GHz wireless signals to cover campus wireless signals B. Cope with "temporary emergency connection for firefighting and disaster relief", "transmission of medical treatment for car accidents", "violence or shooting incidents" inside and outside the campus Emergency rescue treatment", "campus shooting cases or hostage-taking cases in military and police departments", etc.

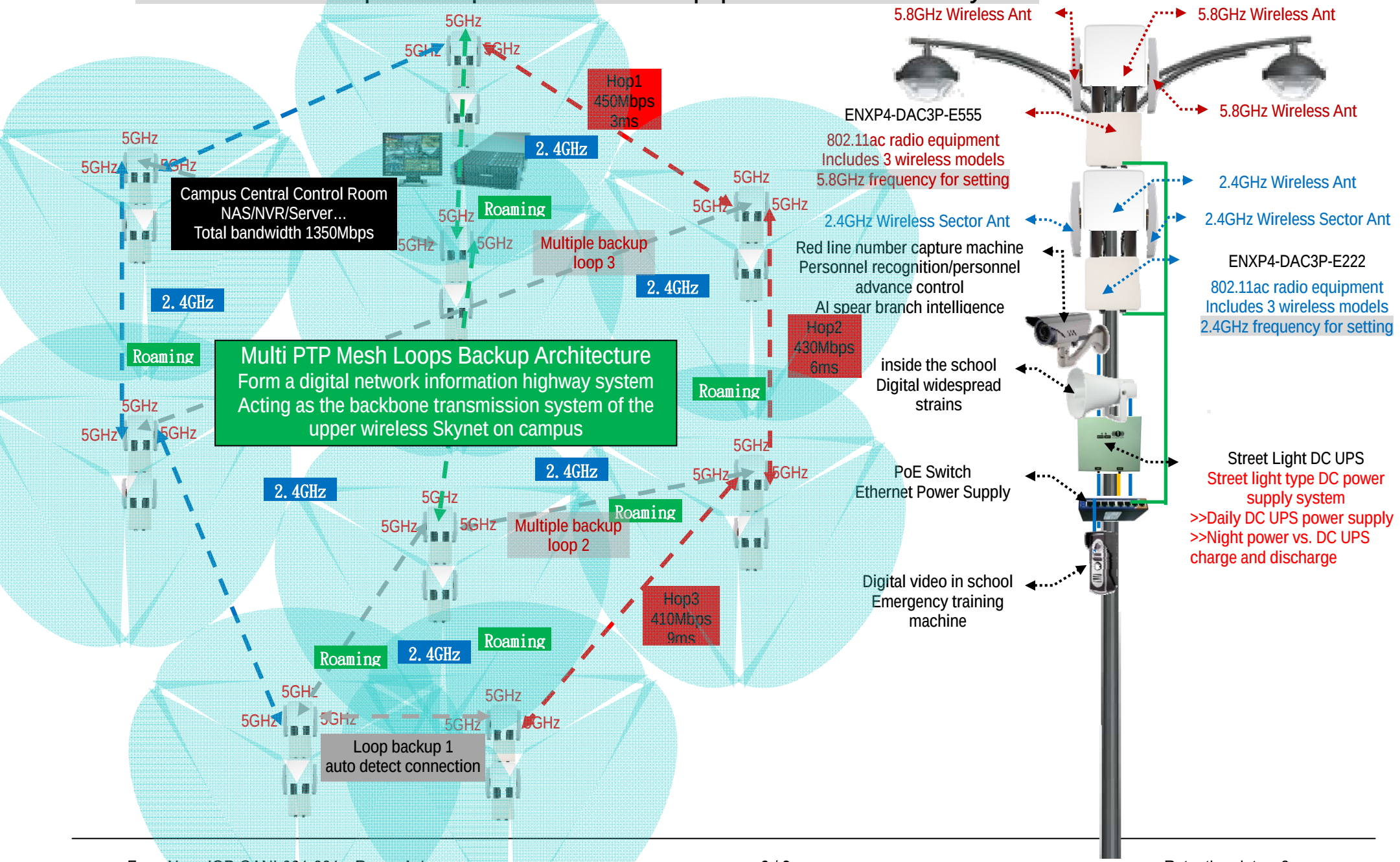
『Campus upper wireless Skynet backbone transmission system』+『Campus temporary emergency networking needs』

5、『Wireless STA/AP operation model』construction Hotspot, formation『School wireless network cover system』design

- (This design solution) Multi-faceted wireless setting STA/AP operation model, formation『School garden wireless network cover network system』
- A. Multi-faceted wireless model, flexible use demand, STA/AP operation mode for setting B. 2.4GHz AP model for setting, fan-shaped 60-120 degree sky line, advanced school wireless communication cover C. Multi-point Hotspot, transparent Multi-screen cover and connection setting, possible to reach Roaming travel effect

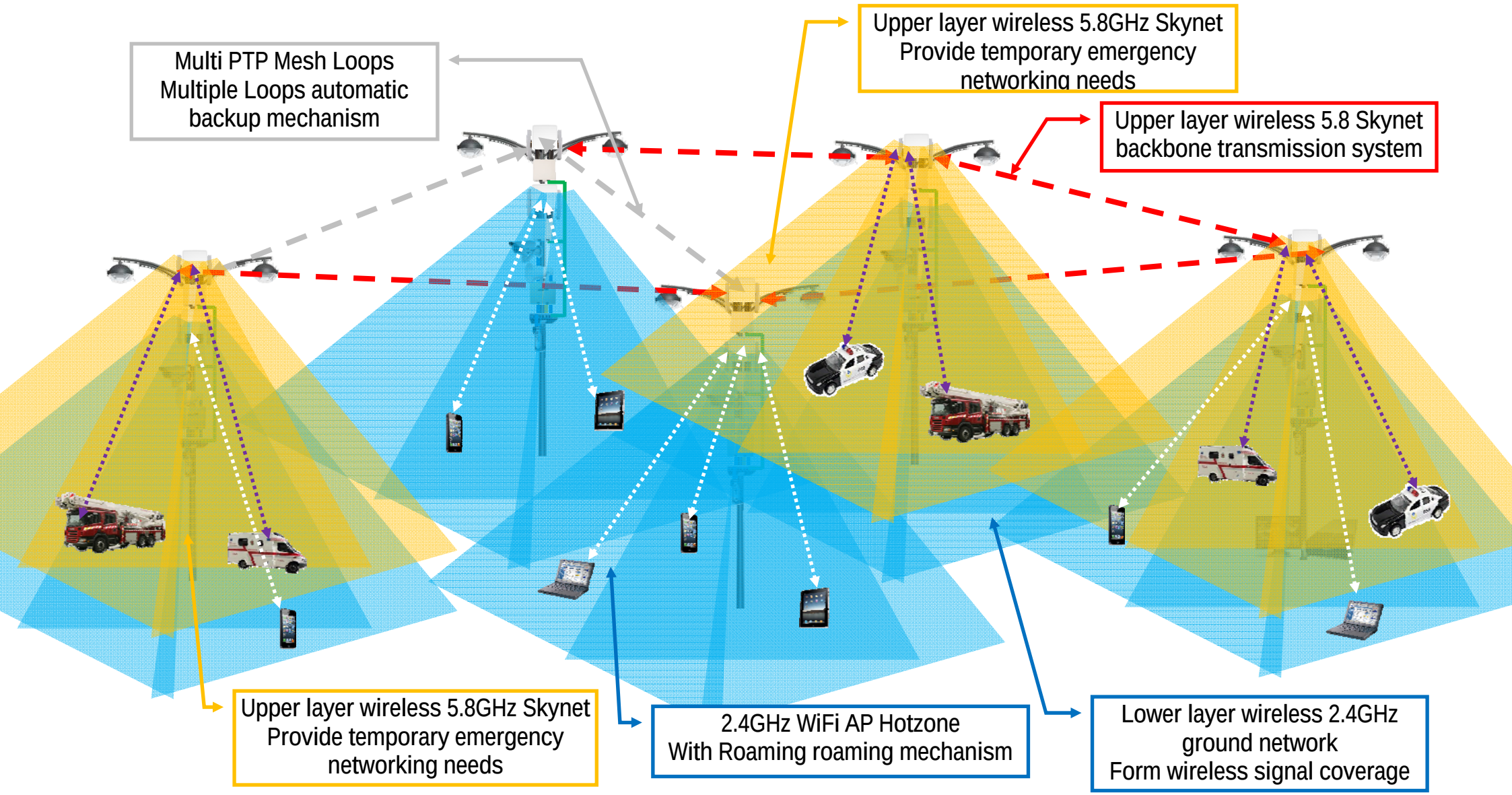


6、 Multi PTP Mesh Loops Backup Multi-link radio equipment transmission system

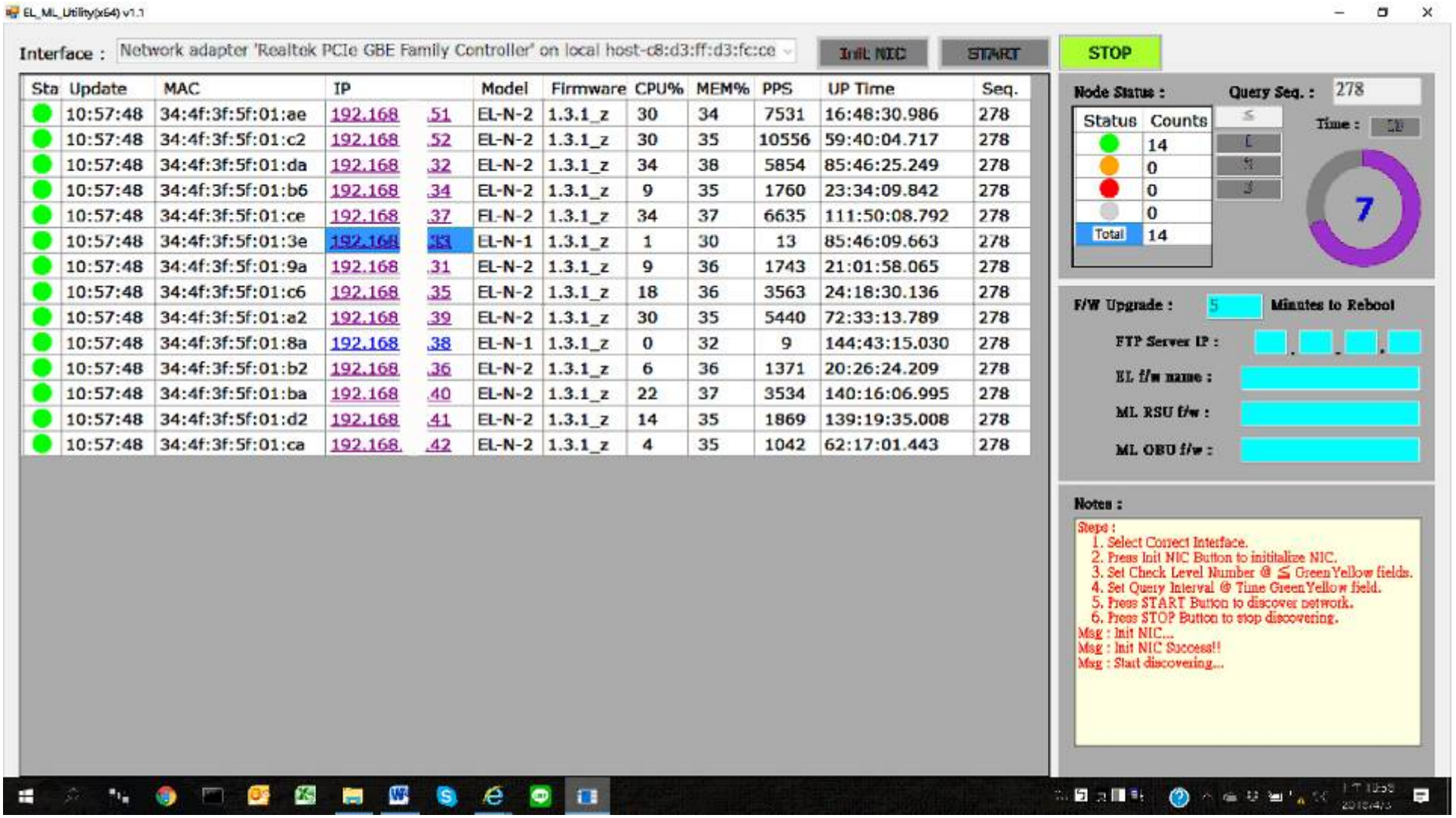


7、 Diagram of the system architecture of the upper wireless Skynet and the lower wireless ground network

■ It can be realized by PTP Mesh Multi Loops backup technology or MESH Network mesh network technology



8、 Simple network scanning management system operation icon (new products will also have MAC-Level 2 software tools)



Sta	Update	MAC	IP	Model	Firmware	CPU%	MEM%	PPS	UP Time	Seq.
●	10:57:48	34:4f:3f:5f:01:ae	192.168 .51	EL-N-2	1.3.1_z	30	34	7531	16:48:30.986	278
●	10:57:48	34:4f:3f:5f:01:c2	192.168 .52	EL-N-2	1.3.1_z	30	35	10556	59:40:04.717	278
●	10:57:48	34:4f:3f:5f:01:da	192.168 .32	EL-N-2	1.3.1_z	34	38	5854	85:46:25.249	278
●	10:57:48	34:4f:3f:5f:01:b6	192.168 .34	EL-N-2	1.3.1_z	9	35	1760	23:34:09.842	278
●	10:57:48	34:4f:3f:5f:01:ce	192.168 .37	EL-N-2	1.3.1_z	34	37	6635	111:50:08.792	278
●	10:57:48	34:4f:3f:5f:01:3e	192.168 .33	EL-N-1	1.3.1_z	1	30	13	85:46:09.663	278
●	10:57:48	34:4f:3f:5f:01:9a	192.168 .31	EL-N-2	1.3.1_z	9	36	1743	21:01:58.065	278
●	10:57:48	34:4f:3f:5f:01:c6	192.168 .35	EL-N-2	1.3.1_z	18	36	3563	24:18:30.136	278
●	10:57:48	34:4f:3f:5f:01:a2	192.168 .39	EL-N-2	1.3.1_z	30	35	5440	72:33:13.789	278
●	10:57:48	34:4f:3f:5f:01:8a	192.168 .38	EL-N-1	1.3.1_z	0	32	9	144:43:15.030	278
●	10:57:48	34:4f:3f:5f:01:b2	192.168 .36	EL-N-2	1.3.1_z	6	36	1371	20:26:24.209	278
●	10:57:48	34:4f:3f:5f:01:ba	192.168 .40	EL-N-2	1.3.1_z	22	37	3534	140:16:06.995	278
●	10:57:48	34:4f:3f:5f:01:d2	192.168 .41	EL-N-2	1.3.1_z	14	35	1869	139:19:35.008	278
●	10:57:48	34:4f:3f:5f:01:ca	192.168 .42	EL-N-2	1.3.1_z	4	35	1042	62:17:01.443	278

IOP-EBLLX-DACXX-XXXX Wireless Device Model Analysis

IOP-EBLLX-DACXX-XXXX

- **Company Name : IOP = IO-Power**
- **Product Series Name : EBLL / ENXP**
- **Product Model : 4 / 5 / 6**
- **RF Module SPEC : Dual Band 802.11ac**
- **Number of Modules : 2 / 3**
- **Functions : P-PTP Mesh / M-MESH / H-Hi-mobile**
- **Antenna Type : P-Patch / S-Sector / E-Thernet**
- **Antenna Frequency : 2.4 / 5.8 / 5.8GHz**