Power over Ethernet(PoE)

In Security Industry

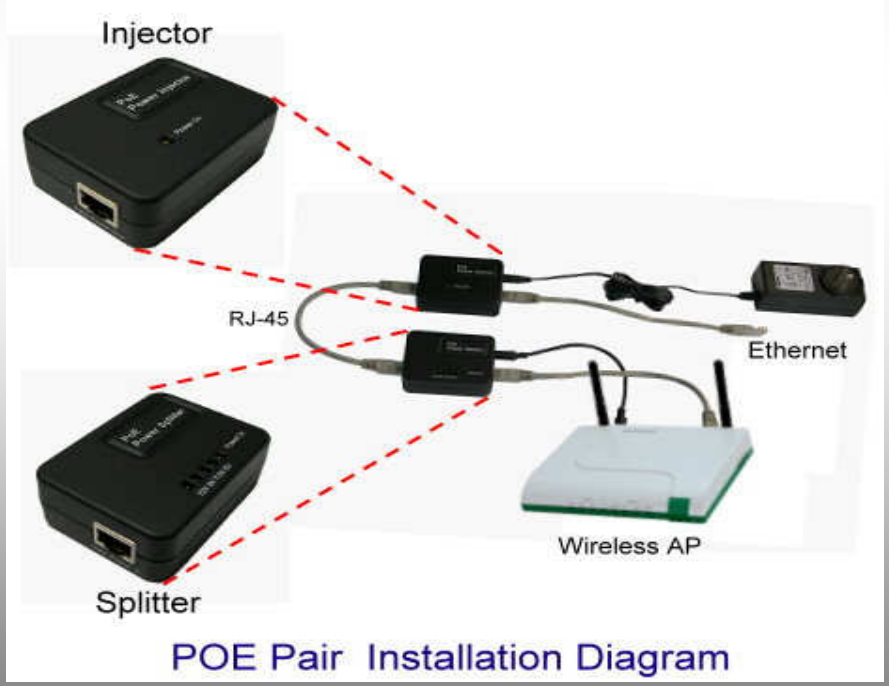
Company Profile

Customers' Voices

- Extends Cat.5/6/7 Cable Network beyond 100 Meters
- Forwards Power Over Ethernet (PoE) to Remote Devices
- No Power Cable wiring Required, No local power supplier
- Fully Transparent - No Restriction to Network Traffic
- Simple to Install – Plug and Play, Works Instantly
- Supports All Network Devices
- With No Degradation in Network Speed or Latency
- Requires outdoor facility for outdoor application
- Compatible with IEEE 802.3af PoE Standard

What is PoE? How does PoE work?

Power over LAN cable in between PoE-PSE and PoE-PD.
Power input over pin 1,2,3,6(end-point) or 4,5,7,8(mid-span).
Cables in the Ethernet network are limited to 100m in length.



PoE Repeater

What is PR100?

Cables in the Ethernet network are limited to 100m in length. Frequently network equipment must be connected over greater distance. PR100 is the one for the solution.

How it works?

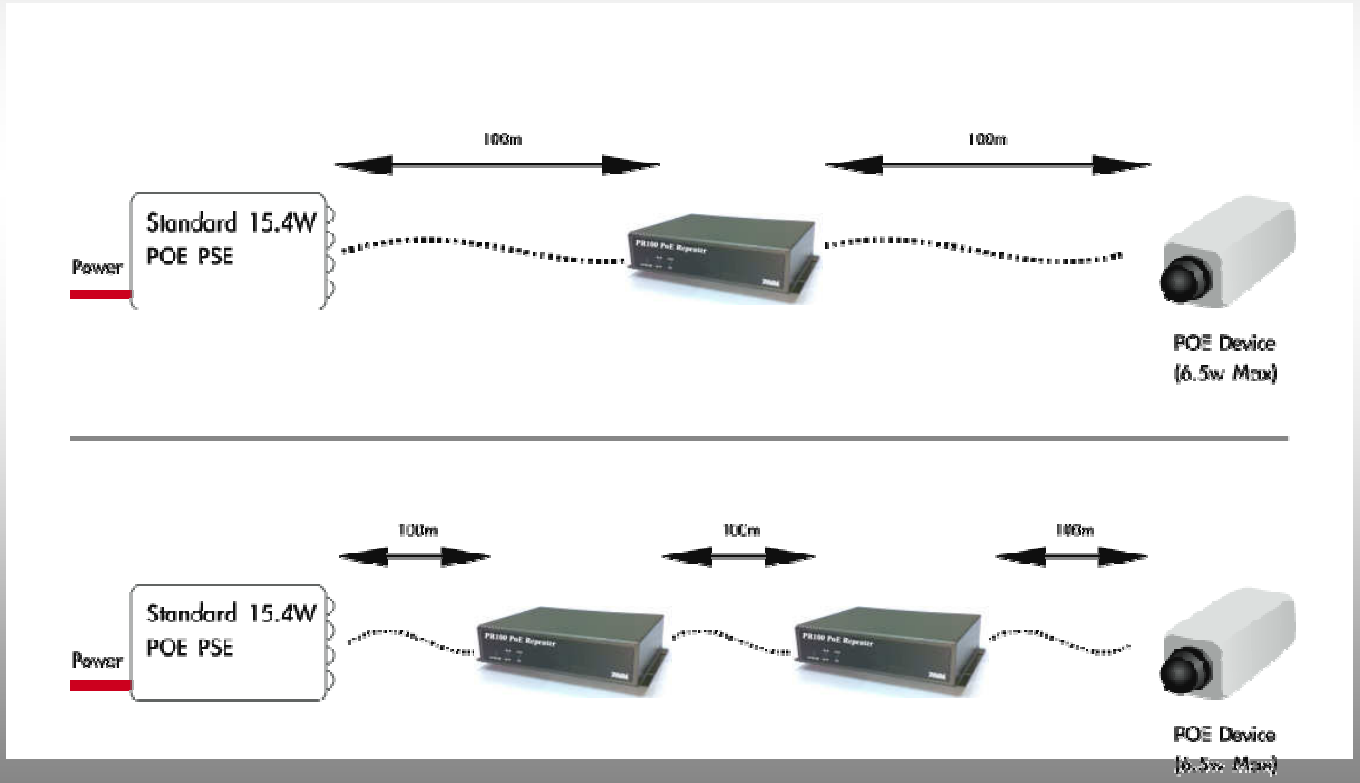
PoE forwarding

PR100 forwards LAN power via network cable by Power Over Ethernet technology and requires no local power supply to be installed for the purpose. It can also forward Ethernet packets onto connected device such as IP camera, wireless AP or IP phone Which embedded with PoE-PD (client PoE).

Daisy-Chaining

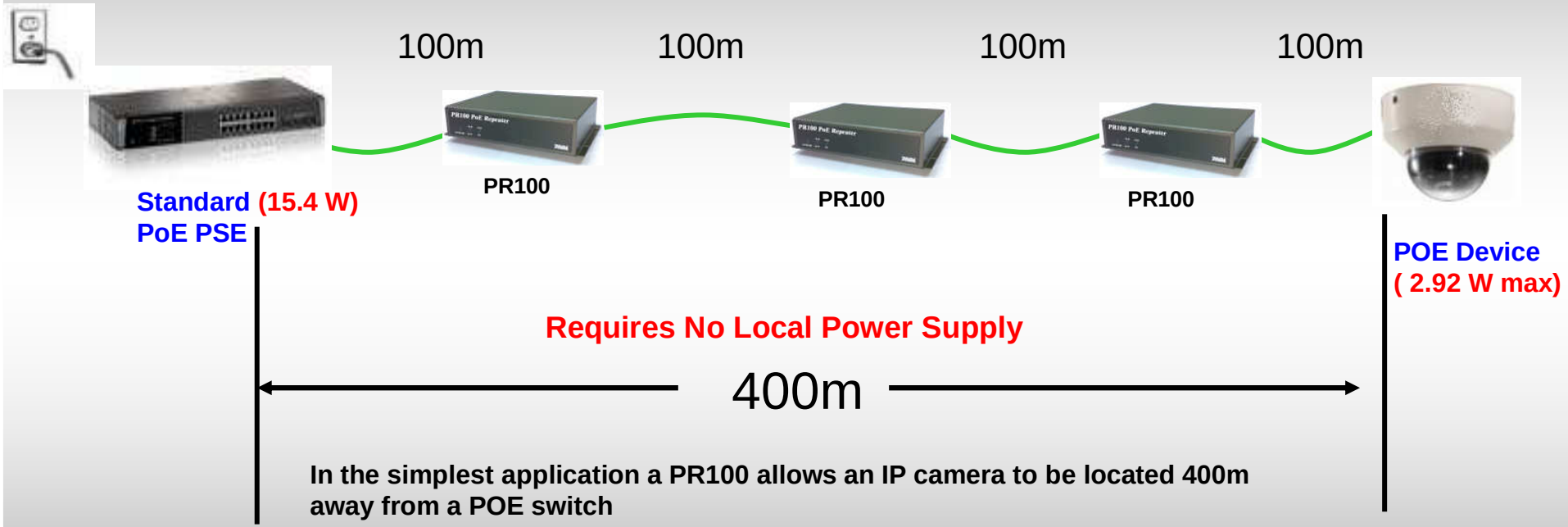
It's possible to connect two or more **PR100** in a chain, with up to 100 meters of cable between each **PR100** or device. Links may be extended up to 600 meters maximal, subject to the power requirements of the connected PoE device, and RJ45 cable quality, etc.

•Basic applications PR100 doubled the network distance to 200 meters in between



•Extends the network connection further 100 meters by making use of daisy-chaining capability

Practical Applications with any IP Cam



The target market is :

1. any wifi AP
2. any IP Cam
3. any LAN devices

Noted a standard 24AWG Cat5 cable with 18~19Ω impedance is used.

Practical Applications with any wifi Outdoor AP

Non-PoE Switch | **PI-300 PSE (40W)** | **PR100 (1st)** | **PR100(6th)** | **PoE Device (2.92 W max)**

Requires No Local Power Supply

700m

In the simplest application a PR100 allows a outdoor AP to be located 700m away from a PoE switch

The target market is :

1. Outdoor AP
2. Outdoor IP-Cam

Noted that standard 18~19Ω (line impedance) 24AWG Cat5 Cable is used.

Maximum Range

Connect with Standard 15.4W PSE

End to end distance	100m	200m	300m	400m	500m
Daisy-Chaining (PR100)	0	1	2	3	N/A
Power Available		≦10.9 W	≦6.5 W	≦3.84 W	Data only No power

Connect with Hi-Power 30W PSE

End to end distance	100m	200m	300m	400m	500m	600m	700m	800m
Daisy-Chaining (PR100)	0	1	2	3	4	5	6	7
Power Available		≦ 25.5W	≦ 21W	≦ 16.5W	≦ 12W	≦ 7.5W	≦ 3.84W	Data only No Power

Connect with Hi-Power 40W PSE

End to end distance	100m	200m	300m	400m	500m	600m	700m	800m	900m
Daisy-Chaining (PR100)	0	1	2	3	4	5	6	7	8
Power Available		≦ 28W	≦ 25.5W	≦ 21W	≦ 16.5W	≦ 12W	≦ 7.5W	≦ 3.84W	Data only No Power

Note: These distances are typical results when used with18~19Ω 24AWG Cat5 Cable.

PR100 works w/ any Outdoor AP

Internal Testing Based on 15.4 W Standard PoE (PSE)

Model Name	Photo (PD Device)	Class	Daisy-Chaining (PR100)			Power Consumption	Maximum Distance		
			15.4 W	30W	40W		15.4 W	30 W	40w
		0	x 2	x 4	x5	9.23 W	300m	500m	600m
		0	x 2	x 5	x6	5.85 W	300m	600m	700m
		0	x 2	x 5	x6	4.3 W	300m	600m	700m
		0	x 2	x 5	x6	5.28 W	300m	600m	700m
		0	x 2	x 5	x6	N/A	300m	600m	700m

Note: These distances are typical results when used with18~19Ω 24AWG Cat5/67 Cables.

PR100 works w/ any IP Cam

Internal Testing Based On High-Power 30/40 W Standard PoE (PSE)

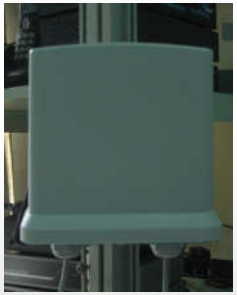
Model Name	Photo	Class	Daisy-Chaining (PR100)			Power Consumption	Maximum Distance		
			15.4 W	30 W	40W		15W	30W	40W
		0	x 2	x 5	x7	3.61 W	300m	600m	800m
		0	x 2	x 5	x7	4.13 W	300m	600m	800m
		3	x 2	x 5	x7	5.79 W	300m	600m	800m
		0	x 3	x 6	x7	2.92 W	300m	700m	900m

Note: These distances are typical results when used with18~19Ω 24AWG Cat5/67 Cables.

PoE Repeater PR102

What is PR102?

PR102 can support upto 2 ports PoE repeater for special project installation.

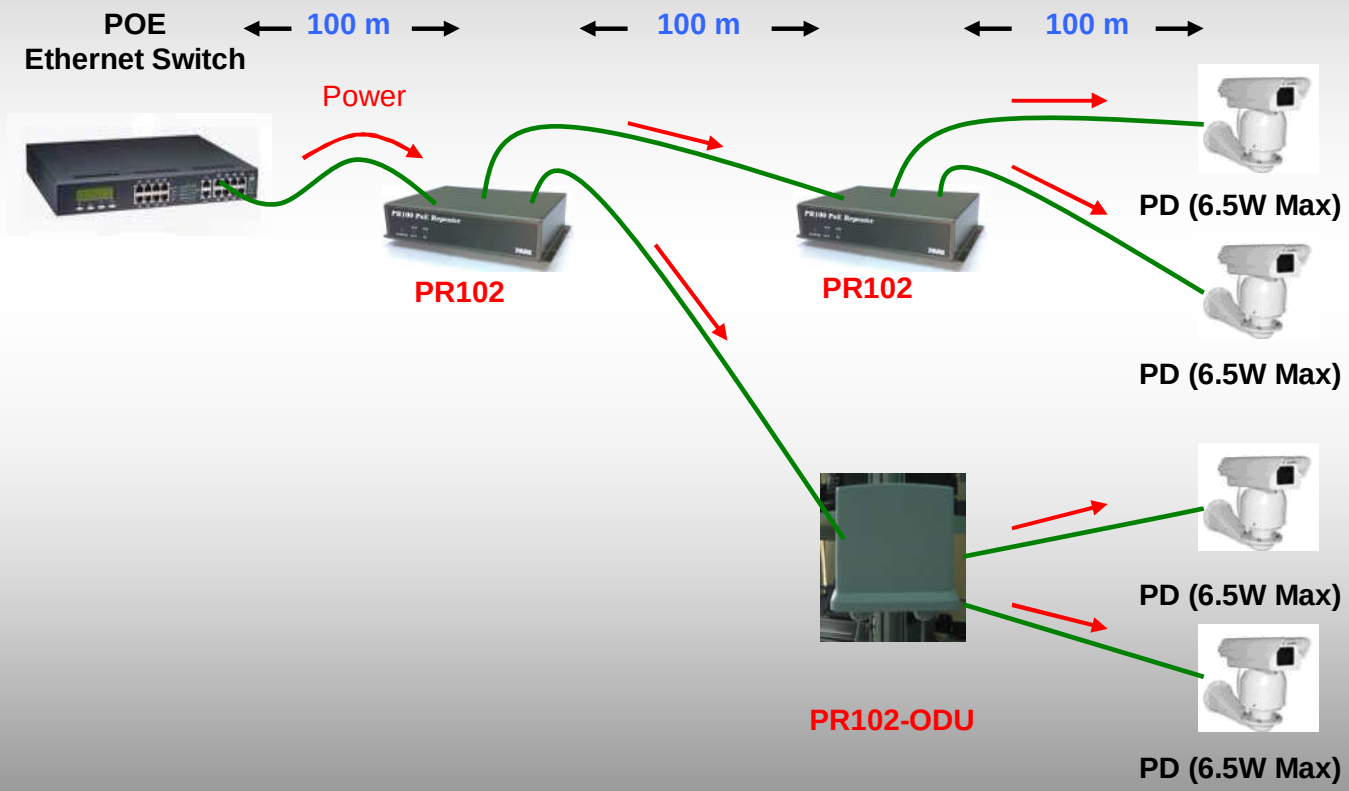


How it works?

PoE forwarding

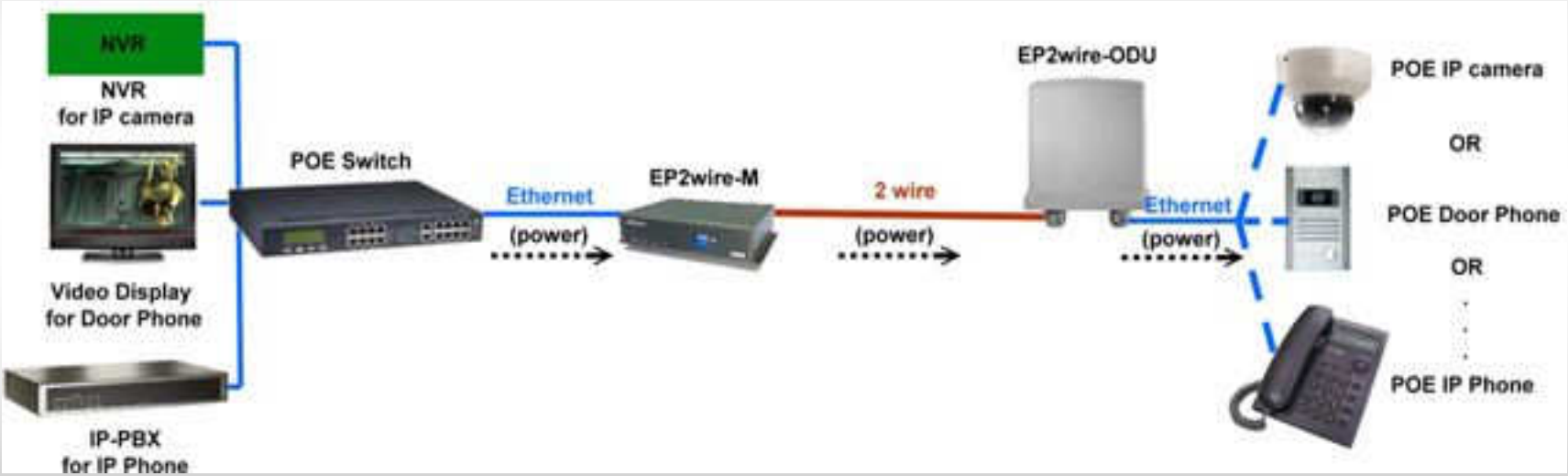
PR102 forwards LAN power via network cable by Power Over Ethernet technology and requires no local power supply to be installed for the purpose. It can also forward Ethernet packets onto connected device such as IP camera, wireless AP or IP phone Which embedded with PoE-PD (client PoE).

PoE Repeater PR102

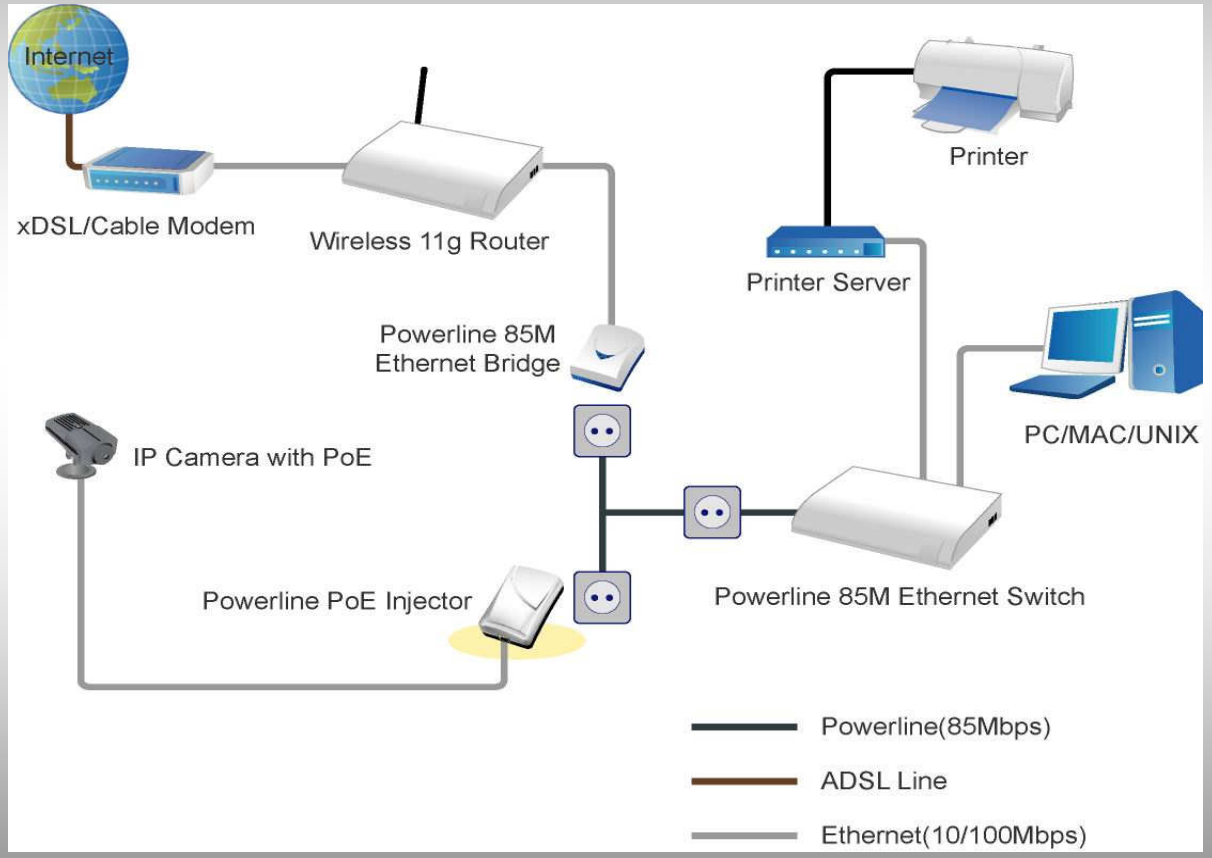


2-wire PoE Repeater

*** PoE Input : 802.3af (15.4w) or High-power (50w)**



PoE over In-house Powerline Network



Business Development

***High-end Surveillance System Provider**

- **ODM PM300 high power splitter into Outdoor housing of Box IP Cam**

If total solution is considered:

- **OEM PR100 Repeater**
- **OEM PI300 high power injector**
- **OEM 2 wire PoE repeater**
- **OEM V102 Modem series(300m)**
- **OEM LRE Modem up to 3km**

H301A

Coming Soon….

- **PW541M : one port uplink, 4-port PoE mid-span with PoE selectable**
- **PR101 : "PR100" with one more splitter for 5/7/9/12V output**

- **PW541HI : 2p High Power PoE Injector**
- **Universal PPS (PoE Power Station) : 19' cabinet with total 8 slots for --**
  ***PW541M Injector midspan**
  ***PI300 High power injector**