

Product Introduction

CERIO

Force Power PoE++

www.cerio.com.tw

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What is CERIO Force Power PoE++?



CERIO Force Power Series PoE Adapters provides a reliable **High-Power** hardware solution that can simultaneously transmit network data and power to the PD equipment through the **4Pair UTP Ethernet Cable** transmission. And provides **supper high speed up to 10 Gigabit** of Ethernet connection ability.



GIGABIT



MULTI-GIGA



10 GIGABIT

Why needs CERIO Force Power PoE++ ?



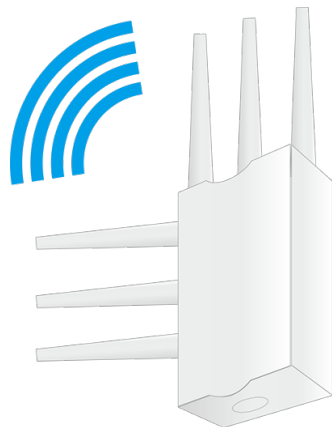
- It's compatible with IEEE 802.3bt power level
 - Type3/Class5 45Watt 、 Class6 60Watt
 - Type4/Class7 72Watt 、 Class8 90Watt
- Provide multi speed of Ethernet connection ability
 - Gigabit
 - Multi-Giga 1G/2.5G/5G
 - 10 Gigabit (5-speed 100M/1G/2.5G/5G/10G)
- With latest Force High Power Hardware design through 4Pair UTP Ethernet Cable to delivery both data and power
- It provides entry-level applications, high flexibility and increased expansion capabilities, greatly simplifying the wiring process and expense.
- The plug-and-play connection provides a best solution for where power outlets are not readily available

Who needs CERIO Force Power PoE++?



CERIO Force Power PoE++ Series it's the perfect solution for high-power demand PD devices such as:

- AIO (All-in-One) touch PC
- PoE IP Speed Dome PTZ CAM
- The latest WiFi 6 generation 802.11ax WiFi AP
- Industrial PC
- Remote digital signage display
- Any network devices which requires PoE high power requirements

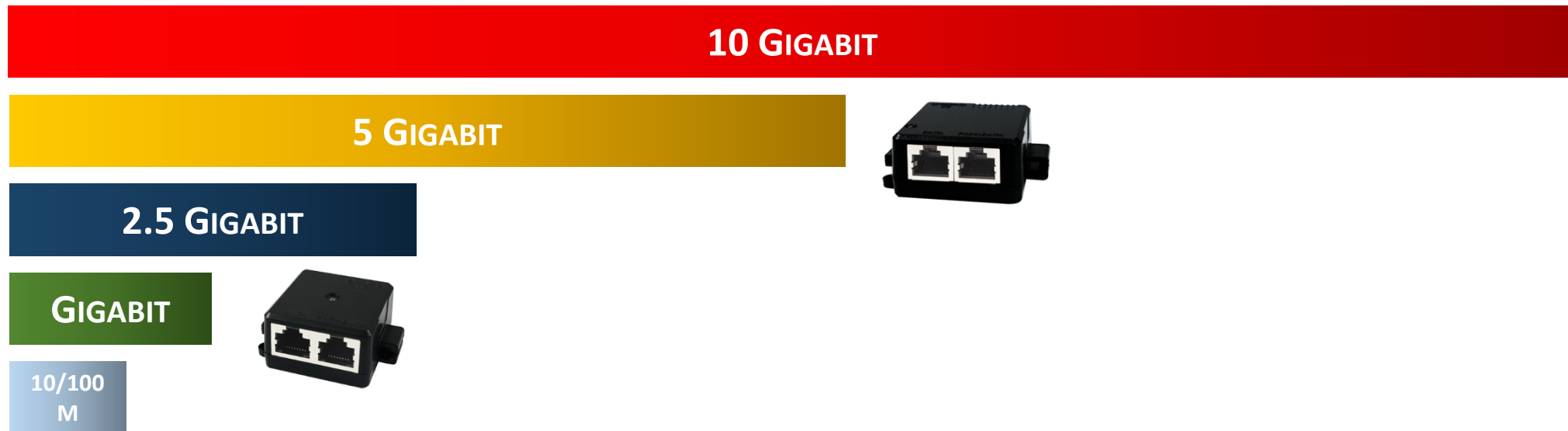


Ethernet Speed up to 10 Gigabit



CERIO Force Power PoE++ Series provide super high speed up to 10 Gigabit of Ethernet connection ability and backward compatible with 10/100M 、Gigabit and Multi-Giga 1G/2.5G/5G Ethernet speed.

5-SPEED ETHERNET CONNECTION



Force Power Series for Cables Power Test

50V for FPOE-MG-90E / FPOE-PE-90E

With Cat.5e (24AWG)

With Cat.6 (23AWG)

With Cat.6A (23AWG)

56V 100Meter passthrough (Keep to 48V) Test

Distance (M)	Load Volt (V)		Load Amper (A)		Load Watt (Watt)		
Meter	Voltage	Loss / %	AMP	Down/up %	Watt	Loss / W	Loss / %
1	55.2000	1~100Meter	1.63	1~100Meter	89.98	1~100Meter	1~100Meter
5	54.9132	-0.52%	1.63	-0.10%	89.42	-0.58	-0.62%
10	54.5547	-1.17%	1.63	-0.22%	88.73	-1.27	-1.39%
15	54.1962	-1.82%	1.62	-0.34%	88.03	-1.97	-2.16%
20	53.8377	-2.47%	1.62	-0.47%	87.34	-2.66	-2.94%
25	53.4792	-3.12%	1.62	-0.59%	86.65	-3.35	-3.71%
30	53.1207	-3.77%	1.62	-0.71%	85.96	-4.04	-4.48%
35	52.7622	-4.42%	1.62	-0.84%	85.28	-4.72	-5.25%
40	52.4037	-5.07%	1.61	-0.96%	84.59	-5.41	-6.03%
45	52.0452	-5.72%	1.61	-1.08%	83.91	-6.09	-6.80%
50	51.6867	-6.36%	1.61	-1.21%	83.23	-6.77	-7.57%
55	51.3282	-7.01%	1.61	-1.33%	82.55	-7.45	-8.34%
60	50.9697	-7.66%	1.61	-1.45%	81.87	-8.13	-9.12%
65	50.6112	-8.31%	1.60	-1.58%	81.19	-8.81	-9.89%
70	50.2527	-8.96%	1.60	-1.70%	80.51	-9.49	-10.66%
75	49.8942	-9.61%	1.60	-1.82%	79.84	-10.16	-11.44%
80	49.5357	-10.26%	1.60	-1.95%	79.16	-10.84	-12.21%
85	49.1772	-10.91%	1.60	-2.07%	78.49	-11.51	-12.98%
90	48.8187	-11.56%	1.59	-2.19%	77.82	-12.18	-13.75%
95	48.4602	-12.21%	1.59	-2.32%	77.15	-12.85	-14.53%
100M	48.1017	-12.86%	1.59	-2.44%	76.48	-13.52	-15.30%

Distance (M)	Load Volt (V)		Load Amper (A)		Load Watt (Watt)		
Meter	Voltage	Down / %	AMP	UP / %	Watt	Loss / W	Loss / %
1	55.2000	1~100Meter	1.63	1~100Meter	90.00	1~100Meter	1~100Meter
5	54.94	-0.47%	1.64	0.54%	90.05	0.05	0.06%
10	54.61	-1.07%	1.65	1.21%	90.12	0.12	0.14%
15	54.29	-1.66%	1.66	1.88%	90.17	0.17	0.22%
20	53.98	-2.25%	1.67	2.55%	90.22	0.22	0.30%
25	53.63	-2.84%	1.68	3.22%	90.26	0.26	0.38%
30	53.30	-3.43%	1.69	3.89%	90.29	0.29	0.46%
35	52.98	-4.03%	1.70	4.56%	90.32	0.32	0.54%
40	52.65	-4.62%	1.72	5.23%	90.33	0.33	0.61%
45	52.32	-5.21%	1.73	5.90%	90.35	0.35	0.69%
50	52.00	-5.80%	1.74	6.57%	90.35	0.35	0.77%
55	51.67	-6.39%	1.75	7.24%	90.35	0.35	0.85%
60	51.34	-6.98%	1.76	7.91%	90.34	0.34	0.93%
65	51.02	-7.58%	1.77	8.59%	90.32	0.32	1.01%
70	50.69	-8.17%	1.78	9.26%	90.30	0.30	1.09%
75	50.36	-8.76%	1.79	9.93%	90.26	0.26	1.17%
80	50.04	-9.35%	1.80	10.60%	90.23	0.23	1.25%
85	49.71	-9.94%	1.81	11.27%	90.18	0.18	1.32%
90	49.38	-10.54%	1.83	11.94%	90.13	0.13	1.40%
95	49.08	-11.13%	1.84	12.61%	90.07	0.07	1.48%
100M	48.73	-11.72%	1.85	13.28%	90.00	0.00	1.56%

Distance (M)	Load Volt (V)		Load Amper (A)		Load Watt (Watt)		
Meter	Voltage	Down / %	AMP	UP / %	Watt	Loss / W	Loss / %
1	55.2000	1~100Meter	1.63	1~100Meter	90.00	1~100Meter	1~100Meter
5	54.96	-0.44%	1.64	0.52%	90.07	0.07	0.08%
10	54.65	-0.99%	1.65	1.17%	90.15	0.15	0.18%
15	54.35	-1.54%	1.66	1.82%	90.23	0.23	0.28%
20	54.05	-2.09%	1.67	2.47%	90.30	0.30	0.38%
25	53.75	-2.64%	1.68	3.12%	90.36	0.36	0.48%
30	53.44	-3.18%	1.69	3.77%	90.41	0.41	0.58%
35	53.14	-3.73%	1.70	4.42%	90.46	0.46	0.68%
40	52.84	-4.28%	1.71	5.06%	90.51	0.51	0.78%
45	52.53	-4.83%	1.72	5.71%	90.54	0.54	0.88%
50	52.23	-5.38%	1.73	6.36%	90.58	0.58	0.98%
55	51.93	-5.93%	1.74	7.01%	90.60	0.60	1.08%
60	51.62	-6.48%	1.76	7.66%	90.62	0.62	1.18%
65	51.32	-7.03%	1.77	8.31%	90.63	0.63	1.28%
70	51.02	-7.58%	1.78	8.96%	90.63	0.63	1.38%
75	50.71	-8.13%	1.79	9.61%	90.63	0.63	1.48%
80	50.41	-8.67%	1.80	10.26%	90.62	0.62	1.59%
85	50.11	-9.22%	1.81	10.91%	90.61	0.61	1.69%
90	49.81	-9.77%	1.82	11.56%	90.59	0.59	1.79%
95	49.50	-10.32%	1.83	12.21%	90.56	0.56	1.89%
100M	49.20	-10.87%	1.84	12.86%	90.53	0.53	1.99%

CERIO Force Power PoE++ provides low cable-loss which can maintain original power source up to 100 meters distance.

- ➡ With Cat.6 or up cable it can keep power source up to **90W**
- ➡ With Cat.5e it can still keep power source up to **76W**

Force Power PoE++ Injector Series



The CERIO Force Power PoE++ Injector Series provides Gigabit , Multi-Giga (1/2.5/5G) and 10 Gigabit Ethernet connection ability. It provides a reliable hardware solution for demanding of IEEE 802.3bt Type3/Class5 45Watt and Class6 60Watt PoE power level PoE/PD powered devices.

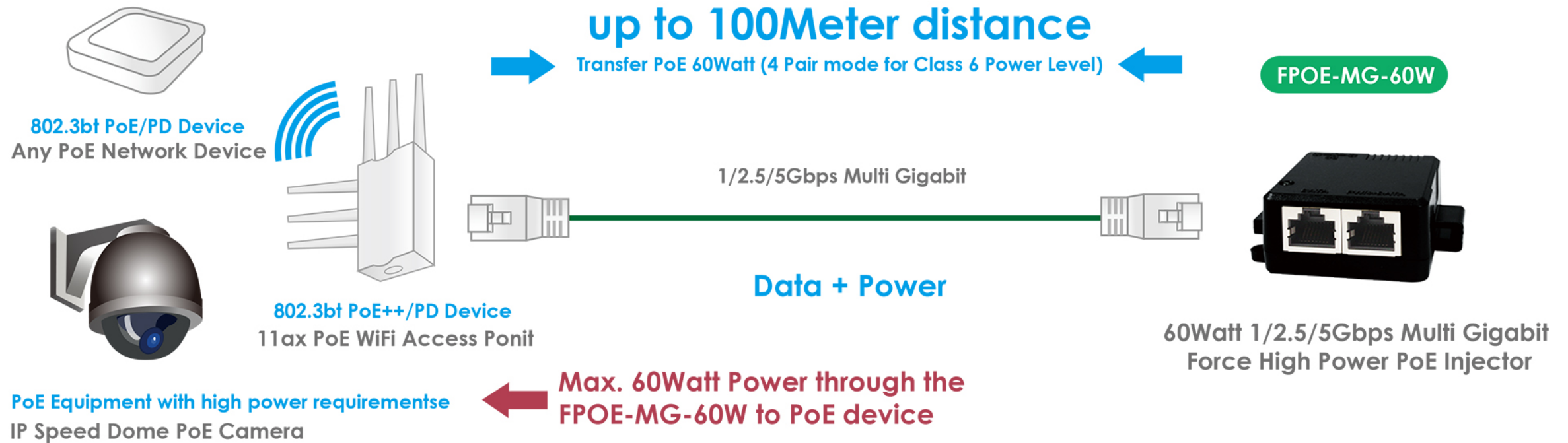


Force Power PoE++ Multi-Giga Application



Force Power applied to PoE Output for 802.3bt/at/af PoE Multi Giga Device

POE 1/2.5/5Gbps Multi Gigabit Device

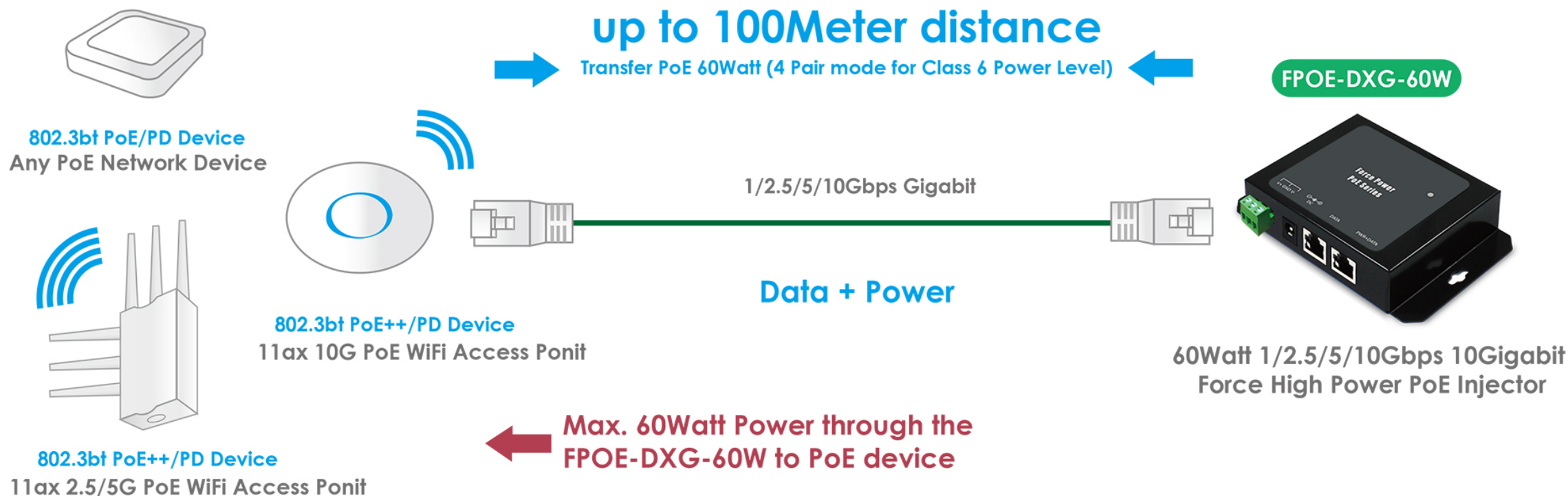


Force Power PoE++ 10 Gigabit Application



Force Power applied to PoE Output for 802.3bt/at/af PoE 10 Giga Device

POE 1/2.5/5/10Gbps XG Gigabit Device



Force Power Edge PoE Adapters Series



The **Cerio Force Power Edge PoE** are able to extend PoE to the Edge PoE equipment (Such as small PoE Switch) to delivery power and data to PD device through the 4Pair UTP Ethernet cable connecting the PSE and PD unit. Through RJ45 UTP cable providing both power and data for where power outlets are not readily available. And without limited by the distance and location of outlet sockets up to 100 meters distance.

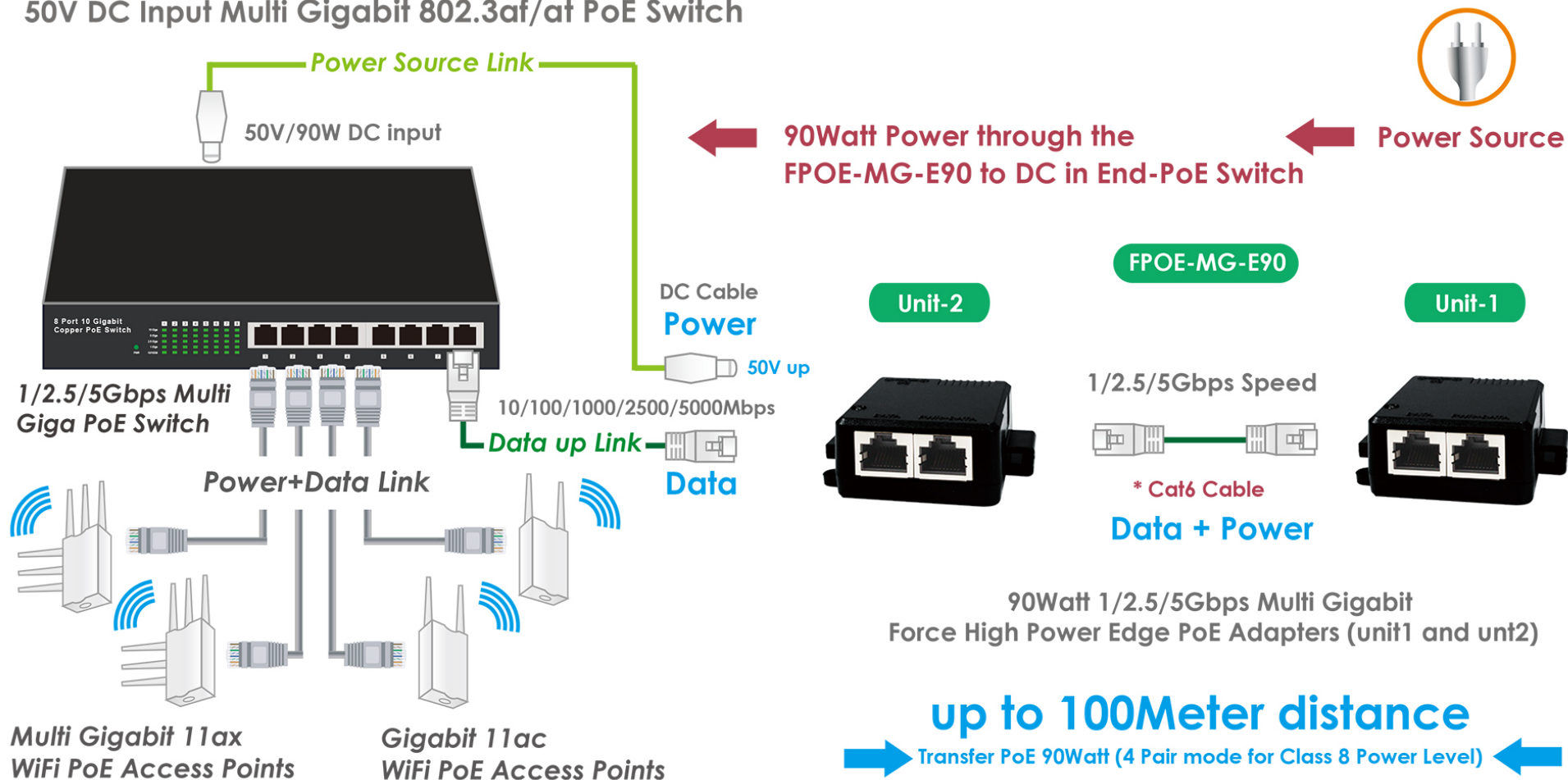


Force Power Edge PoE Multi-Giga Application



Force Power Edge PoE Solution Output to 50VDC to End-PoE Switch

50V DC Input Multi Gigabit 802.3af/at PoE Switch

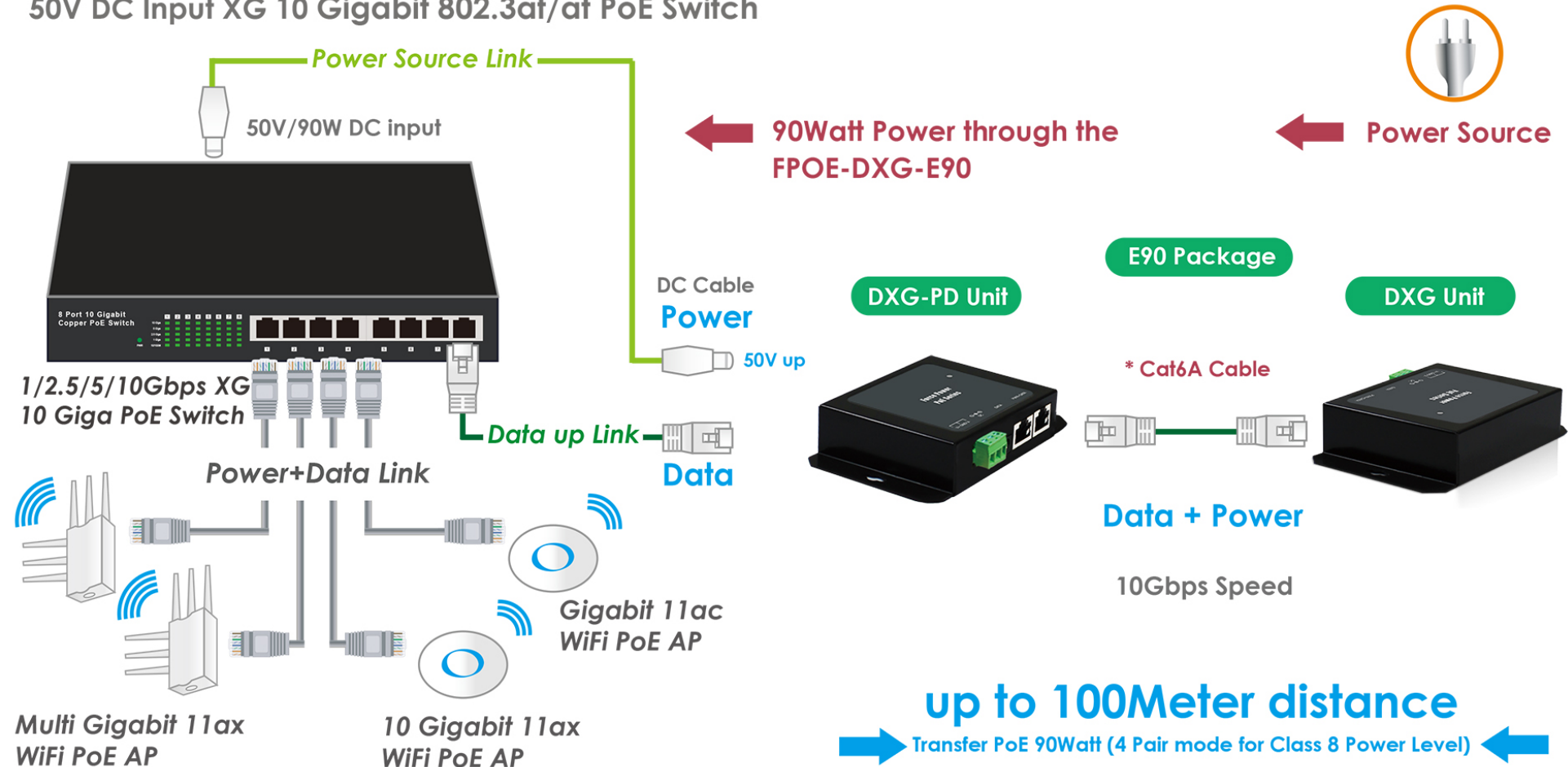


Force Power Edge PoE 10 Gigabit Application



Force Power Edge PoE Solution Output to 50VDC to XG End-PoE Switch

50V DC Input XG 10 Gigabit 802.3af/at PoE Switch



Force Power PoE++ PD Splitter Series



The **CERIO Force Power PD Splitter** provides **Gigabit** , **Multi-Giga(1/2.5/5G)** and **10 Gigabit** Ethernet speed. It supports PoE 50-57V Ethernet power + data input to separate to only DC/Power and Ethernet/Data output. And DC output voltage switchable to **12V or 19V and 24V**. This Force High-Power splitter allows a non-compliant device to upgrade to PoE, it is used to deploy remote non-PoE device with no nearby AC outlets brings lots of convenient.



Force Power PD Splitter Application



Cerio Force High Power Multi Gigabit Splitter applied to Non-PoE devices from 12V to 24VDC



12V~24V 11ac/11ax DC Input
Multi-Giga WiFi Access Point

Max.
Forward 60Watt DC
Power through the Splitter

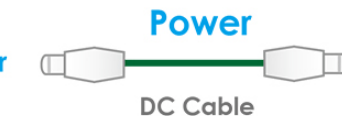


12V~24V DC Input
Multi-Giga Switch



12V~24V DC Input
Multi-Giga INDUSTRIA PC

Max.
Forward 80Watt DC
Power trough the Splitter



up to 100Meter distance
Transfer PoE 60Watt (4 Pair mode for Class 6 Power Level)

FPOE-MG-60W



60Watt 1/2.5/5Gbps Multi Gigabit
Force High Power PoE Injector
(This model is by optional)

FPOE-MPD80



Force High Power 1/2.5/5Gbps
Multi Gigabit Splitter



FPOE-MG-E90



90Watt 1/2.5/5Gbps Multi Gigabit
Force High Power PoE Adapter
(This model is by optional)










Unit-1

up to 100Meter distance
Transfer PoE 90Watt (4 Pair mode for Class 8 Power Level)

* The force high power splitter allows a non compliant device to upgrade to PoE ,It is used to deploy remote non-PoE devices with no nearby AC outlets.

4Pair Force Power PoE+ + Adapter Product List



PRODUCT MODEL	FPOE-PE-60W	FPOE-MG-60W	FPOE-DXG-60W	FPOE-PE-E90	FPOE-MG-E90	FPOE-DXG-E90	FPOE-PD80	FPOE-MPD80	FPOE-XPD80
PRODUCT PHOTO									
PRODUCT TYPE	PoE Injector	PoE Injector	PoE Injector	PoE Injector	PoE Injector	PoE Injector	PD Splitter	PD Splitter	PD Splitter
ETHERNET SPEED	Gigabit	Multi-Giga 1/2.5/5G	10 Gigabit 5-Speed (100M/ 1G/2.5G/5G/10G)	Gigabit	Multi-Giga 1/2.5/5G	10 Gigabit 5-Speed (100M/ 1G/2.5G/5G/10G)	Gigabit	Multi-Giga 1/2.5/5G	10 Gigabit 5-Speed (100M/ 1G/2.5G/5G/10G)
MAX PoE POWER	60W	60W	60W	90W	90W	90W	80W	80W	80W
INPUT VOLTAGE	50-57V	50-57V	50-57V	50-57V	50-57V	50-57V	50-57V	50-57V	50-57V
OUTPUT VOLTAGE	56V	56V	56V	56V	56V	56V	12V/19V/24V	12V/19V/24V	12V/19V/24V
POWER INTERFACE (OUTPUT)	POE out	POE out	DC out	POE out	POE out	DC out	DC out	DC out	DC out
POWER INTERFACE (INPUT)	DC in	DC in	DC in or STB in	DC in	DC IN	DC in or STB in	POE in	POE in	POE in
OPERATING TEMPERATURE	0° to 55° C	0° to 55° C	0° to 65° C	0° to 55° C	0° to 55° C	0° to 65° C	0° to 55° C	0° to 55° C	0° to 55° C
DIMENSION (MM) WEIGHT (G)	54*41*23 32g	64.8*51.7*24 41g	130*82*27 229g	54*41*23 PSE/PD: 32g/32g	64.8*51.7*24 PSE/PD: 41g/41g	130*82*27 PSE/PD: 229g/225g	84.5*80*39.5 93g	84.5*80*39.5 96g	84.5*80*39.5 105g
CABLING	Cat. 5e/6	Cat. 5e/6	Cat. 6a or up	Cat. 5e/6	Cat. 5e/6	Cat. 6a or up	Cat. 5e/6	Cat. 5e/6	Cat. 6a or up

Contact Information



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www.linkedin.com/company/cerio-corporation



www.youtube.com/channel/UCejUL-o3rQavyltXEEMyK1A

What we do



Innovation & Design

Our R&D team continues to incorporate the newest wireless protocols and features to make our products perfect for enterprise deployment.



Wireless Solutions

Our Field Application Engineers and Specialists have unparalleled experience providing the perfect solution for any wireless projects (e.g. Hotels, Long Distance PTP Backhaul, Universities)



Software Development & Design

Our software provides a high featured and easily operated User Interface and also supports centralized AP Management for convenient device deployment.



Outstanding Customer Service

CERIO's customer service staff are experts on our products and possess clear and patient communication skills.