

Industrial IEC 61850-3 Switches

Made for power substation with highest protection level.

Lantech IEC 61850-3 series features high reliability and robustness for power substation automation applications that operate in extremely harsh environments. The series is built for real-time transmission of important packets and against severe electrical interference in power substations.



IEC 61850-3 / IEEE 1613 Certified

The series complies with the strict substation-rated standard of IEC 61850-3 and IEEE 1613. It is able to withstand electrical interference and meets communication requirements for network equipment used in power substations. For example, the switch was tested with high ESD of up to 8K (contact) and 15K (air).



HSR and PRP Support

Followed IEC 62439-3 standard, High-availability Seamless Redundancy (HSR) and the Parallel Redundancy Protocol (PRP) provides the ultimate in network reliability for electric utility applications that demand high availability and very short switch over time. HSR provides zero recovery time in case of failure of one component, while PRP allows systems to overcome any single network failure without affecting the data transmission.



Zero GOOSE Message Packet Loss

The series support standardized GOOSE message that ensures the most critical packets are transmitted. Manager is able to receive and react for unexpected accidents in real time without any packet loss.



REDBOX SERIES		IRXG-5400-2P	IRXG-5408DSFP	IRXE-5408DSFP	IRX-3303C
HARDWARE FEATURES					
Interface	10/100/1000T (RJ45)	Max 24	8	-	-
	10/100TX (RJ45)	-	-	8	-
	1000M SFP	4	-	-	-
	100M/1000M Dual Speed SFP	Max 28	4	4	-
	10/100/1000T/Dual Speed SFP Combo	-	-	-	3
	100M SC Fiber	Max 18	-	-	-
	802.3at/af PoE Injector	Max 24 (PoE model)	-	-	-
	Console	Female DB-9	RJ45	RJ45	RJ45
	DI/DO	2/2	2/2	2/2	2/2
	Relay Contact	●	●	●	●
Power Input	48VDC	● (PoE model)	-	-	-
	18~56VDC	-	●	●	-
	12~56VDC	●	-	-	●
	HV: 85~265VAC/100V~370VDC	●	●	●	●
	LV: 36~75VDC	●	-	-	-
Mechanism	Standard Operating Temperature -20°C~60°C / -4°F~140°F	●	●	●	●
	Wide Operating Temperature -40°C~75°C / -40°F~167°F	●	●	●	●
	Case Protection	IP30	IP30	IP30	IP30
	Case Dimension W x D x H (unit=mm)	440 x 280 x 44	96.3 x 105 x 152	74 x 105 x 152	74 x 105 x 152
	DIN Rail Installation	-	●	●	●
	Wall Mount Installation	-	●	●	●
	19-inch Rack Mount	●	●	●	●
Certification	CE/FCC/RoHS/WEEE	●	●	●	●
	IEC 62439-3 Clause 5 "High-availability Seamless Redundancy (HSR)"	●	●	●	●
	IEC 62439-3 Clause 4 "Parallel Redundancy Protocol (PRP)"	●	●	●	●
	IEC 61850-3/IEEE1613	●	●	●	●
SOFTWARE FEATURES					
Management	HTTP graphical web-based	●	●	●	●
	Telnet, VT100	●	●	●	●
	Command Line Interface (CLI)	●	●	●	●
	SSH/SFTP	●	●	●	●
	SNMP v1, v2c, v3	●	●	●	●
	TACACS+	●	●	●	●
	RADIUS client	●	●	●	●



GOOSE Packet Counter

The exclusive GOOSE monitoring function (IEC packet) can display the counter of GOOSE message transmitted and received by port.



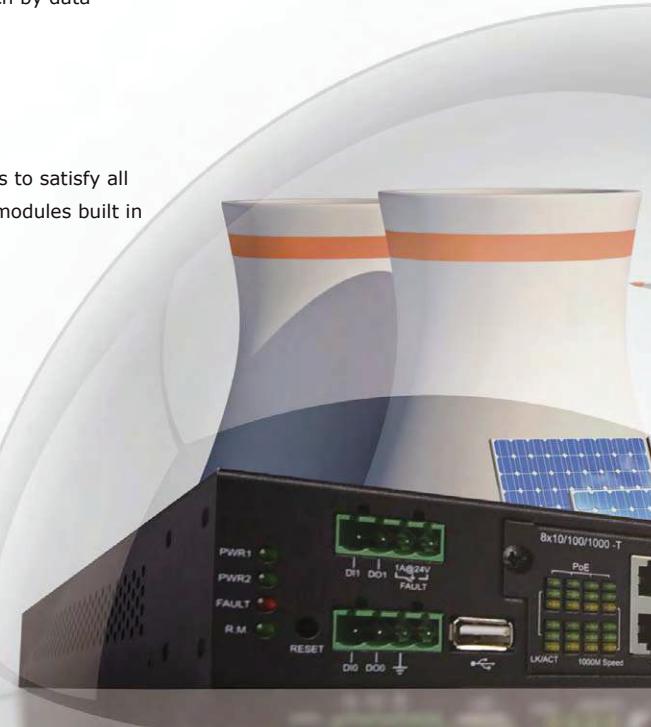
Built-in MMS Server

The built-in MMS (Manufacturing Messaging Specification) server can help power SCADA to monitor and control switch by data modeling.



Flexible Modularity

Lantech provides highly customized modular models to satisfy all kinds of needs, from 100TX to dual speed SFP. All modules built in hardware PTP V2 for precise time synchronization.



	I(P)GS-5400-2P-PT	I(P)GS-5424-PT	I(P)ES-3424DSFP-PT	IPGS-5408GSFPM-PT
HARDWARE FEATURES				
Interface				
10/100TX (RJ45)	-	-	24	-
10/100/1000T (RJ45)	Max 24	24	-	8
100M Fiber	Max 18 (SC)	-	-	-
1000M SFP	4	-	-	4
100M/1000M Dual Speed SFP	Max 28	4	4	-
802.3at/af PoE Injector	Max 24 (PoE model)	24 (PoE model)	24 (PoE model)	8
Console	Female DB-9	Female DB-9	Female DB-9	RJ45
USB for Automatic Backup and Configuration	●	●	●	-
DI/DO	2/2	2/2	2/2	2/2
Relay Contact	●	●	●	●
Power Input				
48VDC	● (PoE model)	● (PoE model)	● (PoE model)	●
18~56VDC	-	-	-	-
9.5~60VDC	-	●	●	-
12~56VDC	●	-	-	-
HV: 85~265VAC/100V~370VDC	●	IGS-5424-PT	IES-3424DSFP-PT	-
LV: 36~75VDC	●	-	-	-
Mechanism				
Standard Operating Temperature	●	●	●	●
-20°C~60°C / -4°F~140°F	●	●	●	●
Wide Operating Temperature	-	-	●	●
-40°C~75°C / -40°F~167°F	-	-	-	-
Case Protection	IP30	IP30	IP30	IP30
Case Dimension W x D x H (unit:mm)	Standard Temp. Model 440 x 280 x 44	440 x 280 x 44	440 x 280 x 44	74 x 105 x 152 96 x 105 x 152
DIN Rail Installation	-	-	-	●
Wall Mount Installation	-	-	-	●
19-inch Rack Mount	●	●	●	●
Certification				
CE/FCC	●	●	●	●
RoHS/WEEE	●	●	●	●
IEC 62439-3 HSR/PRP	●	●	●	●
IEC 61850-3/IEEE1613	●	●	Pending	Pending
SOFTWARE FEATURES				
Management Level (Refer to Page 16)	Premium	Premium	Advanced	Premium



Various Power Input Selection

To satisfy the different needs for power substation application, Lantech provides complete power input selection for each model. No matter the input voltage is high/low or VAC/VDC.



IEEE1588 PTP V2

The hardware-based IEEE1588 PTP V2 function allows each port to synchronize the network with precise accuracy (under 1μs). It's one of the most critical requirements for power substation applications.



Wider Operating Temperature

Substation environment is harsh than others, where temperatures may run as high as 75°C or as low as -40°C. To guarantee the network will continue to function, Lantech designed the series with wider temperature tolerance up to -40°C~85°C.



IGS-5408GSFPM-PT



IES-5408DFTM-PT



IES-5408DSFPM-PT



IES-5408FM-PT



IPES-3408GSFPM-PT



IES-3408GSFPM-PT

	IGS-5408GSFPM-PT	IES-5408DFTM-PT	IES-5408DSFPM-PT	IES-5408FM-PT	IPES-3408GSFPM-PT	IES-3408GSFPM-PT
-	8	8	8	8	8	8
8	-	2	-	-	-	-
-	-	-	-	4	-	-
4	-	-	-	-	4	4
-	2	-	4	-	-	-
-	-	-	-	-	8	-
RJ45	RJ45	RJ45	RJ45	RJ45	RJ45	RJ45
-	-	-	-	-	-	-
2/2	2/2	2/2	2/2	2/2	2/2	2/2
●	●	●	●	●	●	●
-	-	-	-	-	●	-
●	●	●	●	●	-	●
-	-	-	-	-	-	-
●	●	●	●	●	-	●
-	-	-	-	-	-	-
●	●	●	●	●	●	●
-	-	-	-	-	-	-
IP30	IP30	IP30	IP30	IP30	IP30	IP30
-	74 x 105 x 152	74 x 105 x 152	74 x 105 x 152	74 x 105 x 152	74 x 105 x 152	74 x 105 x 152
●	●	●	●	●	●	●
●	●	●	●	●	●	●
●	●	●	●	●	●	●
●	●	●	●	●	●	●
●	●	●	●	●	●	●
●	●	●	●	●	●	●
Pending	●	●	●	●	●	●
Premium	Premium	Premium	Premium	Premium	Advanced	Advanced