

# Industrial EN50155 Switches

Best for rolling stock applications. Reliable yet powerful.

Designed for railway and other rugged applications, Lantech EN50155 certified series provides rugged protection with IP67/IP43 housing with M12/M23 connection. Lantech delivers the most complete product line to satisfy all your needs – 5 to 24 ports, PoE/non-PoE, fiber/Giga T, and 12V/72V/110V/HV power inputs.



## IP67 / IP43 Rugged Aluminum Housing

To against dust and water in harsh environment, Lantech designed the series with rugged IP67/IP43 housing with aluminum. Aluminum is high thermal conductivity, non-magnetic, light weight, and oxidation resistance that ensure our products deliver high performance with the best stability.



## Gigabit Uplink & Dual Speed Fiber

Lantech EN50155 switches provide Giga speed connectivity, including 10/100/1000T and dual speed fiber. No matter 100M or 1000M fiber is inserted, the dual speed fiber port is able to function well.



## EN50155 / E-mark\* / EN45545-2 Certified Reliability

These standards are defined to ensure the operation safety and environmental friendly for rolling stock applications.



NEW



NEW



		I(P)GS-5012T	I(P)ES-5222T	I(P)ES-5416DFT	I(P)ES-5416DF	I(P)ES-5416T	I(P)ES-5216DF
<b>HARDWARE FEATURES</b>							
Interface	10/100TX (M12)	-	20	16	16	16	16
	10/100/1000T (M12)	12	2	2	-	4	-
	1000M Fiber (LC)	-	-	-	-	-	-
	100M Fiber (LC)	-	-	-	-	-	-
	100/1000 Dual Speed Fiber (LC)	-	-	2	4	-	2
	802.3at/af PoE Injector	8 (PoE model)	16 (PoE model)	8 (PoE model)	8 (PoE model)	8 or 16 (PoE model)	8 (PoE model)
	Console	M12	M12	M12	M12	M12	M12
	DI/DO	1/1	1/1	1/1	1/1	1/1	1/1
	Relay Contact	●	●	●	●	●	●
	Bypass	4x4/2x2	2x2	2x2	4x4/2x2	4x4/2x2	2x2
Power Input	Power Supply - M23	IPES-5012T-8	IPES-5222T-16	IPES-5416DFT-8	IPES-5416DF-8	IPES-5416T	IPES-5216DF-8
	Power Supply - M12	IES-5012T	IES-5222T	IES-5416DFT	IES-5416DF	IES-5416T	IES-5216DF
	12V (9.5~60VDC)	●	●	●	●	●	●
	48V (45~56VDC)	IPES-5012T-8	IPES-5222T-16	IPES-5416DFT-8	IPES-5416DF-8	IPES-5416T	IPES-5216DF-8
	72V (50.4~90VDC)	●	●	●	●	●	●
	110V (77~150VDC)	●	●	●	●	●	●
Mechanism	HV (85~265VAC/100~300VDC)	●	●	●	●	●	●
	Wide Operating Temperature -40°C~75°C / -40°F~167°F	●	●	●	●	●	●
	Case Protection	IP67/IP43	IP67/IP43	IP67/IP43	IP67/IP43	IP67/IP43	IP67/IP43
	Case Dimension	IP67 285 x 201.4 x 77.6	285 x 201.4 x 77.6	285 x 201.4 x 77.6	285 x 186 x 77.6	285 x 201.4 x 77.6	285 x 186 x 77.6
	W x H x D (unit=mm)	IP43 273 x 188.4 x 77.6	273 x 188.4 x 77.6	273 x 188.4 x 77.6	273 x 173 x 77.6	273 x 188.4 x 77.6	273 x 173 x 77.6
	DIN Rail Installation	●	●	●	●	●	●
Certification	Wall Mount Installation	●	●	●	●	●	●
	CE/FCC/RoHS/WEEE	●	●	●	●	●	●
	EN50155 & EN61373	●	●	●	●	●	●
	E-Mark (E4)	Pending	Pending	Pending	Pending	Pending	Pending
	EN45545-2 Fire & Smoke	●	●	●	●	●	●
	ISO 7637	-	-	-	-	-	-
<b>SOFTWARE FEATURES</b>							
Management Level (Refer to Page 16)		Premium	Premium	Premium	Premium	Premium	Premium



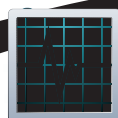
### IEEE802.3at PoE, 2X Output Power

All Lantech EN50155 PoE models supports IEEE802.3at standard and is able to feed up to 30W at each PoE port, which is twice as previous 802.3af standard.



### 4ms Bypass Protection

The bypass relay is set to bypass the switch to the next one in 4ms when power is off in order to protect the network from crashing at daisy chain topology. Lantech bypass caters to remain in bypass mode until the switch is completely booting up when power is back to avoid another network crash while booting up. The bypass is activated when CPU watchdog is ON to rescue the network from crash.



### Built-in Environmental Monitoring

All Lantech EN50155 managed switches are built-in environmental monitoring. Users can view the switch's ambient temperature, input voltage, and input current along with CPU and memory buffer in real time.



I(P)ES-5408T	I(P)ES-5208DF	I(P)GS-3006T-43	I(P)GS-0006T-43	I(P)ES-0208T	I(P)ES-0208GF	I(P)ES-0208F
8	8	-	-	8	8	8
4	-	6	6	2	-	-
-	-	-	-	-	2	-
-	-	-	-	-	-	2
-	2	-	-	-	-	-
8 (PoE model)	8 (PoE model)	4 (PoE model)	4 (PoE model)	8 (PoE model)	8 (PoE model)	8 (PoE model)
M12	M12	M12	M12	M12	M12	M12
1/1	1/1	1/1	1/1	-	-	-
●	●	●	●	●	●	●
4x4/2x2	2x2	4x4/2x2	4x4/2x2	2x2	2x2	2x2
IPES-5408T	IPES-5208DF	IPGS-3006T-4	IPGS-0006T-4	IPES-0208T	IPES-0208GF	IPES-0208F
IES-5408T	IES-5208DF	IGS-3006T	IGS-0006T	IES-0208T	IES-0208GF	IES-0208F
●	●	●	●	●	●	●
IPES-5408T	IPES-5208DF	IPGS-3006T-4	IPGS-0006T-4	-	-	-
●	●	●	●	IPES-0208T	IPES-0208GF	IPES-0208F
●	IES-5208DF	●	●	IES-0208T	IES-0208GF	IES-0208F
-	-	-	-	-	-	-
●	●	●	●	●	●	●
IP67/IP43	IP67/IP43	IP43	IP43	IP67/IP43	IP67/IP43	IP67/IP43
215 x 201.4 x 77.6	215 x 200 x 77.6	-	-	215 x 201.4 x 77.6	215 x 200 x 77.6	215 x 200 x 77.6
203 x 188.4 x 77.6	203 x 187 x 77.6	135 x 165 x 62	135 x 165 x 62	203 x 188.4 x 77.6	203 x 187 x 77.6	203 x 187 x 77.6
●	●	●	●	●	●	●
●	●	●	●	●	●	●
●	●	●	●	●	●	●
●	●	●	●	●	●	●
Pending	Pending	Pending	Pending	●	●	●
●	●	●	●	●	●	●
-	-	-	●	●	●	●
Premium	Premium	Advanced	Unmanaged	Unmanaged	Unmanaged	Unmanaged



### Complete Power Input Range

The series provides the most complete power input range in the market. Except the normal input spec, the 12V, 72V, 110V, and HV (=High Voltage) are also available to satisfy any industrial environment.



### Compact in Size

The new I(P)ES-0008B and I(P)ES-0005B are designed with compact housing which is best for limited space such as bus or other vehicles.

### Various M12 / M23 Cable Design

Moving vehicles may face vibration continuously that causes the disconnection of network cables. Lantech provides 90 and 180 degree M12 / M23 connectors that ensure cable installation with the highest flexibility.



		IPES-0008A-12V	IES-0008A	I(P)ES-0008B-43	IPES-0005A-12V	I(P)ES-0005B-43
<b>HARDWARE FEATURES</b>						
Interface	10/100TX (M12)	8	8	8	5	5
	10/100/1000T (M12)	-	-	-	-	-
	1000M Fiber (LC)	-	-	-	-	-
	100M Fiber (LC)	-	-	-	-	-
	100/1000 Dual Speed Fiber (LC)	-	-	-	-	-
	802.3at/af PoE Injector	8	-	8 (PoE model)	5	5 (PoE model)
	Console	M12	M12	-	M12	-
	DI/DO	-	-	-	-	-
	Relay Contact	●	●	●	●	●
	Bypass	-	-	-	-	-
Power Input	Power Supply - M23	●	-	-	-	-
	Power Supply - M12	-	●	●	●	●
	12V (9.5~60VDC)	●	-	●	●	●
	48V (45~56VDC)	-	-	IPES-0008B	-	IPES-0005B
	72V (50.4~90VDC)	●	9.5~90VDC	●	●	●
	110V (77~150VDC)	●	-	-	●	-
Mechanism	HV (85~265VAC/100~300VDC)	-	-	-	-	-
	Wide Operating Temperature -40°C~75°C / -40°F~167°F	●	●	●	●	●
	Case Protection	IP67/IP43	IP67/IP43	IP43	IP67/IP43	IP43
	Case Dimension W x H x D (unit=mm)	IP67 215 x 186 x 77.6 IP43 203 x 173 x 77.6	215 x 186 x 77.6 203 x 173 x 77.6	- 135 x 165 x 62	215 x 186 x 77.6 203 x 173 x 77.6	- 135 x 165 x 62
	DIN Rail Installation	●	●	●	●	●
	Wall Mount Installation	●	●	●	●	●
Certification	CE/FCC/RoHS/WEEE	●	●	●	●	●
	EN50155 & EN61373	●	●	●	●	●
	E-Mark (E4)	●	●	Pending	Pending	Pending
	EN45545-2 Fire & Smoke	●	●	●	●	●
	ISO 7637	●	●	●	●	●
<b>SOFTWARE FEATURES</b>						
Management Level (Refer to Page 16)		Unmanaged	Unmanaged	Unmanaged	Unmanaged	Unmanaged