Appendix - *Product Selection Table*

Core Switch

ICS-G24S4X ICS-G24S2X ICS-M2404X ICS-G24044X ICS-G24044X-24PH

Model	Total Port	GbE Port			10 GbE	PoE port	Redundant Input Power	Certification			
		100/1000 Base-X SFP	10/100/1000 Base-T RJ45	100/1000Base-X SFP & RJ45	IEEE802.3ae SFP+	IEEE802.3at (budget)		Railway EN50121-4	Safety UL60950-1 EN60950-1	EN61000-6-2 EN61000-6-4	CE, FCC
ICS-G24S4X	28	20		4 Combo	4		110/220V AC/DC or 24/48, -48V DC	✓	UL60950-1	✓	✓
ICS-G24S2X	26	20		4 Combo	2		110/220V AC/DC or 24/48, -48V DC	✓	UL60950-1	✓	✓
ICS-M2404X	28	3 slots module			4		110/220V AC/DC or 24/48, -48V DC	✓	✓	✓	✓
ICS-G24044X	32		24	4 SFP	4		110/220V AC/DC or 24/48, -48V DC	✓	✓	✓	✓
ICS-G24044X-24PH	32		24	4 SFP	4	24(240W)	48VDC,-48VDC	✓	✓	✓	✓

4G LTE Router

ICR-4103

Model	Managed	WAN			Local Port			Certification		
		SIM	Cellular Mobile	10/100Base-TX	10/100Base-TX	RS232	RS485 (ModBus RTU)	Railway EN50121-4	EN61000-6-2 EN61000-6-4	CE, FCC
ICR-4103	✓	2 SIM for Redundant	2G/3G/4G LTE band	1	3	2	1	✓	✓	✓

SyncE Switch

IGS-804SM-SE IGS-1608SM-SE

Model	Managed	Total Port	RJ45 Port	Fiber Port	Sync Ethernet	Redundant Input Power	Certification			
			10/100/1000 Base-T	100/1000 Base-X			Railway EN50121-4	Safety UL60950-1 EN60950-1	EN61000-6-2 EN61000-6-4	CE, FCC
IGS-804SM-SE	✓	12	8	4 SFP	✓	12/24/48, -48V DC	✓	EN60950-1	✓	✓
IGS-1608SM-SE	✓	24	16	8 SFP	✓	12/24/48, -48V DC	✓	✓	✓	✓

Managed PoE Switch

IGS-M2404S   IGS-2408SM-24PH   IGS+402SM-4PH24 IGS-402SM-4PU   IGS+803SM-8PH24   IGS-1608SM-8PH IFS-1608GSM-8PH   IFS+402GSM-4PH24 IFS-402GSM-4PU   IFS+803GSM-8PH24

Model	Managed	Total Port	RJ45 Port		Fiber Port	PoE Port		Redundant Input Power	Certification				
			10/100 Base-TX	10/100/1000 Base-T	100/1000 Base-X	IEEE802.3at (budget)	IEEE802.3bt (budget)		Railway EN50121-4	Safety EN60950-1	Safety UL60950-1	EN61000-6-2 EN61000-6-4	CE, FCC
IGS-M2404S	✓ (Rackmount)	28	3 slot Module + 4x GbE SFP					48V DC, -48V DC	✓	✓	✓	✓	✓
IGS-2408SM-24PH	✓ (Rackmount)	32		24	8 SFP	24 (400W)		48V DC, -48V DC	✓	✓	✓	✓	✓
IGS+402SM-4PH24	✓	6		4	2 SFP	4 (120W)		24/48/-48V DC	✓	✓	✓	✓	✓
IGS-402SM-4PU	✓	6		4	2 SFP		4 (240W)	48/-48V DC	✓	✓	✓	✓	✓
IGS+803SM-8PH24	✓	11		8	3 SFP	8(180W)		24/48/-48V DC	✓	✓	✓	✓	✓
IGS-1608SM-8PH	✓	24		16	8 SFP	8 (240W)		48, -48V DC	✓	✓	✓	✓	✓
IFS+402GSM-4PH24	✓	6	4		2 SFP	4(120W)		24/48/-48V DC	✓	✓	✓	✓	✓
IFS-402GSM-4PU	✓	6	4		2 SFP		4 (240W)	48/-48V DC	✓	✓	✓	✓	✓
IFS+803GSM-8PH24	✓	11	8		3 SFP	8(180W)		24/48/-48V DC	✓	✓	✓	✓	✓
IFS-1608GSM-8PH	✓	24	16		8 SFP	8 (240W)		48, -48V DC	✓	✓	✓	✓	✓

Appendix - Product Selection Table

IGS-402SM-4PH24   IGS-402SM-4PU   IGS-402F-4PH24   IGS-600-4PH24   IGS-802GS-8PH   IFS-1602GS-8PH

Unmanaged PoE Switch

Model	Total Port	RJ45 Port		Fiber Port		PoE Port		Redundant Input Power	Certification			
		10/100 Base-TX	10/100/1000 Base-T	1000 Base-X	100/1000 Base-X	IEEE802.3at (budget)	IEEE802.3bt (budget)		Railway EN50121-4	Safety UL60950-1	EN61000-6-2 EN61000-6-4	CE, FCC
IGS-402S-4PH24	6		4		2 SFP	4 (120W)		24/48V DC	✓	✓	✓	✓
IGS-402S-4PU	6		4		2 SFP		4 (240W)	48V DC	✓		✓	✓
IGS-402F-4PH24	6		4	2 SC		4 (120W)		24/48V DC	✓	✓	✓	✓
IGS-600-4PH24	6		6			4 (120W)		24/48V DC	✓	✓	✓	✓
IFS-802GS-8PH	10	8			2 SFP		8 (240W)	48V DC	✓		✓	✓
IFS-1602GS-8PH	18	16			2 SFP		8 (240W)	48V DC	✓		✓	✓

IGS-M2404S   IGS-S2804TM   IGS-2408SM   IGS⁺404SM   IFS⁺402GSM   IGS⁺803SM IFS⁺803GSM   IGS-812SM   IGS-1604SM IFS-1604GSM

Managed Ethernet Switch

Model	Managed	Total Port	RJ45 Port		Fiber Port	Redundant Input Power	Certification				
			10/100 Base-TX	10/100/1000 Base-T	100/1000 Base-X		Railway EN50121-4	Safety EN60950-1	Safety UL60950-1	EN61000-6-2 EN61000-6-4	CE, FCC
IGS-M2404S	✓ (Rackmount)	28	3 slot Module + 4x GbE SFP			110/220V AC/DC or 24/48, -48V DC	✓	✓	✓	✓	✓
IGS-S2804TM	✓ (Rackmount)	28	4		28 SFP	110/220V AC/DC or 24/48, -48V DC	✓		✓	✓	✓
IGS-2408SM	✓ (Rackmount)	32	24		8 SFP	110/220V AC/DC or 24/48, -48V DC	✓	✓	✓	✓	✓
IGS⁺404SM	✓	8		4	4 SFP	12/24/48, -48V DC	✓	✓	✓	✓	✓
IGS⁺803SM	✓	11		8	3 SFP	12/24/48, -48V DC	✓	✓	✓	✓	✓
IGS-812SM	✓	20		8	12 SFP	12/24/48VDC	✓		✓	✓	✓
IGS-1604SM	✓	20		16	4 SFP	12/24/48VDC	✓		✓	✓	✓
IFS+402GSM	✓	6	4		2 SFP	12/24/48, -48V DC	✓	✓	✓	✓	✓
IFS+803GSM	✓	11	8		3 SFP	12/24/48, -48V DC	✓	✓	✓	✓	✓
IFS-1604GSM	✓	20	16		4 SFP	12/24/48VDC	✓		✓	✓	✓

IGS-402F   IGS-402S   IGS-500   IGS-501S   IGS-800 IFS-800   IFS-401F   IFS-402F   IFS-500C   IFS-802GS   IFS-1602GS

Unmanaged Ethernet Switch

Model	Total Port	RJ45 Port		Fiber Port			Power Input		Certification			
		10/100 Base-TX	10/100/1000 Base-T	100 Base-FX	1000 Base-X	100/1000 Base-X	Redundant	Single Power	Railway EN50121-4	Safety UL60950-1	EN61000-6-2 EN61000-6-4	CE, FCC
IGS-402F	6		4		2 SC		12/24/48V DC		✓	✓	✓	✓
IGS-402S	6		4			2 SFP	12/24/48V DC		✓	✓	✓	✓
IGS-500	5		5				12/24/48V DC		✓		✓	✓
IGS-501S	6		5			1 SFP	12/24/48V DC		✓		✓	✓
IGS-800	8		8				12/24/48V DC		✓		✓	✓
IFS-401F	5	4		1 SC/ST			12/24/48V DC		✓		✓	✓
IFS-402F	6	4		2 SC/ST			12/24/48V DC		✓		✓	✓
IFS-500C	5	5						12/24/48V DC	✓		✓	✓
IFS-800	8	8					12/24/48V DC		✓		✓	✓
IFS-802GS	10	8				2 SFP	12/24/48V DC		✓		✓	✓
IFS-1602GS	18	16				2 SFP	12/24/48V DC		✓		✓	✓

Appendix - *Product Selection Table*

IMC-1000MS-PH12   IMC-1000S-PH12   IMC-100-PH12

PoE Converter

Model	Managed	RJ45 Port		Fiber Port		PoE Port	Redundant Input Power	Certification		
		10/100 Base-TX	10/100/1000 Base-T	100 Base-FX	100/1000 Base-X	IEEE802.3at (budget)		Railway EN50121-4	EN61000-6-2 EN61000-6-4	CE, FCC
IMC-1000MS-PH12	✓		1		1 SFP	1 (30W)	12/24/48V DC	✓	✓	✓
IMC-1000S-PH12			1		1 SFP	1 (30W)	12/24/48V DC	✓	✓	✓
IMC-100-PH12		1		1 SC/ST		1 (30W)	12/24/48V DC	✓	✓	✓

IMC-1000MS   IMC-100   IMC-100C   IMC-1000CS   IMC-1000   IMC-1000S

Ethernet Converter

Model	Managed	RJ45 Port		Fiber Port		Power Input		Certification			
		10/100 Base-TX	10/100/1000 Base-T	100 Base-FX	100/1000 Base-X	Redundant	Single Power	Railway EN50121-4	Safety UL60950-1	EN61000-6-2 EN61000-6-4	CE, FCC
IMC-1000MS	✓		1		1 SFP	12/24/48V DC		✓	✓	✓	✓
IMC-100		1		1 SC/ST		12/24/48V DC		✓	✓	✓	✓
IMC-100C		1		1 SC/ST			12/24/48V DC	✓		✓	✓
IMC-1000CS		1			1 SFP		12/24/48V DC	✓		✓	✓
IMC-1000C		1			1 SC		12/24/48V DC	✓		✓	✓
IMC-1000S		1			1 SFP	12/24/48V DC		✓	✓	✓	✓

IBP-202

Optical Bypass Switch

Model	Fiber connector			Certification		
	Connector type	Connector port	Data rate	Railway EN50121-4	EN61000-6-2 EN61000-6-4	CE, FCC
IBP-202	SM SC/ST/LC	4	100M/Giga/10G	✓	✓	✓

IFC-FDC   IFC-Serial   IFC-FDC-PRO   IFC-Serial-PRO   IFC-FDC-CAN

FieldBus Fiber Converter

Model	Dual Channel	Serial (Field Bus transparent)					Fiber		Redundant Input Power	Certification		
		RS232	RS422/ 485	FieldBus	Baud Rate Max	Isolation (2.5KV)	SC/ST	Daisy Chain		Safety UL60950-1	EN61000-6-2, EN61000-6-4	CE, FCC
IFC-FDC	✓	2	1	ModBus or Others	1Mbps	✓	2	✓	12/24/48V DC	✓	✓	✓
IFC-Serial	✓	2	1	ModBus or Others	1Mbps	✓	1		12/24/48V DC	✓	✓	✓
IFC-FDC-PRO			1	ProfiBus	12Mbps	✓	2	✓	12/24/48V DC		✓	✓
IFC-Serial-PRO			1	ProfiBus	12Mbps	✓	1		12/24/48V DC		✓	✓
IFC-Serial-CAN				Can Bus	1Mbps	✓	1		12/24/48V DC		✓	✓

IEXT224-4PH

PoE Ethernet Extender

Model	RJ45 UTP		Long distance extended		Redundant Input Power	Certification		
	10/100 Base-TX	IEEE802.3at PoE (Power budget)	RJ11 (2 wire)	Coaxial		Railway EN50121-4	EN61000-6-2 EN61000-6-4	CE, FCC
IEXT224-4PH	4	4(30W)	1	1	48V DC		✓	✓

Appendix - Product Selection Table

IEXT211

LAN Extender

Model	RJ45 UTP	Long distance extended		Redundant Input Power	Certification		
	10/100Base-TX	RJ11(2 wire)	Coaxial		Railway EN50121-4	EN61000-6-2 EN61000-6-4	CE, FCC
IEXT211	1	1	1	48V DC	✓	✓	✓

INJ-IG60-24   INJ-IG01-PH   INJ-G30

PoE Injector

Model	LAN RJ45 Port	PoE RJ45 Port		Power Input		Certification		
	10/100/1000 Base-T(X)	10/100/1000 Base-T(X)	PoE 15.4W/30W/36W/60W	Redundant	Single Power	EN61000-6-2 EN61000-6-4	EN50121-4	CE/FCC
INJ-IG60-24	✓	✓	✓	24/48V DC		✓	✓	✓
INJ-IG01-PH	✓	✓	✓		48V DC	✓	✓	✓
INJ-G30	✓	✓	15.4W/30W		110/220VAC			✓

ITP-2204GTM-16PH   ITP-1204GTM-12PH   ITP-G802SM-8PH24 ITP-802GSM-8PH24   ITP-G802TM-8PH24 ITP-802GTM-8PH24   ITP-800-8PH24

EN 50155 PoE Switch

Model	Managed	IP67	Total Port	M12 UTP Port		Fiber Port	PoE Port	Redundant Input Power	Certification				
				10/100 Base-TX	10/100/1000 Base-T (X or A-code)	100/1000 Base-X	IEEE802.3at (budget)		EN50155	Railway EN50121-4	Safety UL60950-1	EN61000-6-2 EN61000-6-4	CE, FCC
ITP-2204GTM-16PH	✓	IP64	26	22	4		16(120W)	24/48/110VDC	✓	✓	EN60950-1	✓	✓
ITP-1204GTM-12PH	✓	IP64	16	12	4		12(120W)	24/48/110VDC	✓	✓	EN60950-1	✓	✓
ITP-G802SM-8PH24	✓	✓	10		8	2 SFP	8(180W)	24/48V DC	✓	✓	✓	✓	✓
ITP-G802TM-8PH24	✓	✓	10		10		8(180W)	24/48V DC	✓	✓	✓	✓	✓
ITP-802GSM-8PH24	✓	✓	10	8		2 SFP	8(180W)	24/48V DC	✓	✓	✓	✓	✓
ITP-802GTM-8PH24	✓	✓	10	8	2		8(180W)	24/48V DC	✓	✓	✓	✓	✓
ITP-800-8PH24		✓	8	8			8(180W)	24/48V DC	✓	✓		✓	✓

ITP-2204GTM   ITP-1204GTM   ITP-G802SM ITP-802GSM   ITP-G802TM ITP-802GTM   ITP-500 ITP-800

EN 50155 Switch

Model	Managed	IP67	Total Port	M12 UTP Port		Fiber Port	Redundant Input Power	Certification				
				10/100 Base-TX	10/100/1000 Base-T (X or A-code)	100/1000 Base-X		EN50155	Railway EN50121-4	Safety UL60950-1	EN61000-6-2 EN61000-6-4	CE, FCC
ITP-2204GTM	✓	IP64	26	22	4		24/48/110VDC	✓	✓	EN60950-1	✓	✓
ITP-1204GTM	✓	IP64	16	12	4		24/48/110VDC	✓	✓	EN60950-1	✓	✓
ITP-G802SM	✓	✓	10		8	2 SFP	110/220V AC/DC or 24/48V DC	✓	✓	✓	✓	✓
ITP-G802TM	✓	✓	10		10		110/220V AC/DC or 24/48V DC	✓	✓	✓	✓	✓
ITP-802GSM	✓	✓	10	8		2 SFP	110/220V AC/DC or 24/48V DC	✓	✓	✓	✓	✓
ITP-802GTM	✓	✓	10	8	2		110/220V AC/DC or 24/48V DC	✓	✓	✓	✓	✓
ITP-500		✓	5	5			12/24/48V DC	✓	✓		✓	✓
ITP-800		✓	8	8			12/24/48V DC	✓	✓		✓	✓

Appendix - *Product Selection Table*

IPS-M2404S   IPS-G803SM   IPS-803GSM

IEC 61850-3 Switch

Model	Managed	Total Port	RJ45 Port		Fiber	Redundant Input Power	Certification				
			10/100 Base-TX	10/100/1000 Base-T	100/1000 Base-X		IEC61850-3 IEEE1613	Railway EN50121-4	Safety UL60950-1	EN61000-6-2 EN61000-6-4	CE, FCC
IPS-M2404S	✓ (Rackmount)	28	3 slot Module + 4x GbE SFP			110/220V AC/DC or 24/48, -48V DC	✓	✓	✓	✓	✓
IPS-G803SM	✓	11		8	3 SFP	110/220V AC/DC or 24/48, -48V DC	✓	✓	✓	✓	✓
IPS-803GSM	✓	11	8		3 SFP	110/220V AC/DC or 24/48, -48V DC	✓	✓	✓	✓	✓

STE100A/RS232
STE100A-Serial

IP Device Server

Model	RJ45 Port	Serial Port		Single Power Input	Certification
	10/100Base-TX	RS232	RS232/422/485		CE,FCC
STE100A/RS232	1	1		110/220VAC Power Adapter	✓
STE100A-Serial	1		1	110/220VAC Power Adapter	✓