Media Converters

From entry-level Media converters to advanced smart versions, ATOP's media converters are ideal for transitioning from copper-based to fiber-based networks. They provide reliable solutions to all conversions between single-mode or multi-mode optics to Ethernet conversion.

All products in this series are suitable for operational temperatures from -20°C to +70°C. Selected versions can operate in temperatures between -40°C and +70°C. And they come with redundant power supplies and automatic speed negotiation.

Industrial Smart Ethernet to Fiber converter, Auto Speed Negotiation, DIN-Rail Mount

-10°C 70°C | DIN | | IP30 IEC60529

	SKU	Description	10/100 RJ45 ports	10/100 /1000 RJ45 ports	Auto Negotiation SFP slots	Fiber ports	Rated distance
	EF23-1-1Fm-SC-2	Fast Ethernet to Fiber converter, SC connector, multi-mode, 2km	1			1 (multi-mode)	2 km
	EF23-1-1Fs-SC-30	Fast Ethernet to Fiber converter, SC connector, single-mode, 30km	1			1 (single-mode)	30 km
	EF24-1G-1Fm-SC-550M	Gigabit Ethernet to Fiber converter, SC connector, multi-mode, 550m	-	1	-	1 (multi-mode)	550 m
	EF24-1G-2Fm-SC-550M	Gigabit Ethernet to Fiber converter and repeater, SC connector, multi-mode, 550m	-	1	-	2 (multi-mode)	550 m
	EF24-1G-1Fs-SC-10K	Gigabit Ethernet to Fiber converter, SC connector, single-mode, 10 km	-	1	-	1 (single-mode)	10 Km
	EF24-1G-2Fs-SC-10K	Gigabit Ethernet to Fiber converter and repeater, SC connector, single-mode, 10 km	-	1	-	2 (single-mode)	10 Km
	EF24-1G-1Fs-SC-20K	Gigabit Ethernet to Fiber converter, SC connector, single-mode, 20 km	-	1	-	1 (single-mode)	20 Km
	EF24-1G-1SFP	Gigabit Ethernet to Fiber converter, SFP slot	-	1	1	1 (SFP slot)	n/a
	EF24-1G-2SFP	Gigabit Ethernet to Fiber converter and repeater, SFP slot	-	1	2	2 (SFP slot)	n/a

Serial to Fiber Media Converters, DIN-Rail Mount, Metal Housing

-40°C 70°C | DIN | IP30 IEC60529

	SKU	Description	RS-232 RS-485 RS-422 TB5	Fiber ports	Rated distance
	SF63-TB-DB-1Fm-SC	Serial-to-Fiber Media Converter, multi-mode, SC connector, 2 km	1	1 (multi-mode)	2 Km
	SF63-TB-DB-1Fs-SC	Serial-to-Fiber Media Converter, Single-mode, SC connector, 30 km	1	1 (single-mode)	30 Km
	SF63-TB-DB-1Fm-ST	Serial-to-Fiber Media Converter, multi-mode, ST connector, 2 km	1	1 (multi-mode)	2 Km
	SF63-TB-DB-1Fs-ST	Serial-to-Fiber Media Converter, Single-mode, ST connector, 30 km	1	1 (single-mode)	30 Km

Compact plug-on RS-232 to RS-485/422 media convertor

-40°C / 70°C | DIN | IP30 IEC60529

SKU	Description	RS-232	RS422/485	Isolation voltage	Power connector
SS100	Signal conversion between RS232 and RS-485/422	DB9	TB-6	-	TB-2
SS100-SiS-R	Signal conversion between RS232 and RS-485/422	DB9	TB-6	3000 VDC at RS232	TB-2
SS100-J	Signal conversion between RS232 and RS-485/422	DB9	TB-6	-	DC-Jack

Serial Device Servers

ATOP's Serial to Ethernet Device Servers allow easy connection between RS-232/422/485 legacy devices to Ethernet through both wireless or wired connectivity. These devices are specifically designed to allow industrial devices to be directly accessible from the local network or the Internet. Our devices are from entry-level to industrial grade, support 1 - 16 serial and are available in field-mount, DIN-rail mount, and rack-mount, making them very powerful platforms for legacy devices integration with modern network infrastructures. Our industrial serial servers adhere to industrial network performance requirements, such as IEC 61850 and EN 50155.

ATOP Serial Device Servers' versions provide programmability with SDKs on Linux-based platforms. Using the supplied Programming guide, it is easy to develop applications for specific applications. **Ask your sales representative for more information.**

Entry level Serial Device Servers

Specially designed for automation fields, ATOP's Entry-level Serial Device Servers provide 1- or 2-port RS-232/RS-422/RS-485 connectivity. They are suitable for simple and less demanding applications. Protected by rugged metal case with wall or DIN Rail mount, these Serial Device Servers are available with a DB9 or TB5 connector with 2kV magnetic isolation. Selected versions are Industrial-EMC certified.

Entry Level Serial Device Server, Field Mount, Metal Housing

-40°C / 70°C | IP30 IEC60529

SKU	Description	RS-232 RS-485 RS-422 TB5	RS-232 RS-485 RS-422 DB9	10/100 RJ45 Ports	Additional features
SE5201C-DB	1-Port Serial device Server, DB9	-	1	1	-40~70 °C operation
SE5201C-TB	1-Port Serial device Server, TB5	1	-	1	-40~70 °C operation

Industrial EMC Serial Server, Field Mount, Metal Housing

70ºC -40ºC | Industrial EMC | IP30 IEC60529

SKU	RS-232 RS-485 RS-422 TB5	RS-232 RS-485 RS-422 DB9	10/100 RJ45 Ports	100 SFP slots	Additional features
SE5201-DB	-	1	1		
SE5201-TB	1	-	1		
SE5202-DB	-	2	1	-	
SE5202-TB	2	-	1	-	
SE5202-SiS	2	-	1	-	2.5kV isolation
SE5202-SFP-DB	-	2	-	1	
SE5202-SFP-TB	2	-	-	1	

Wireless or Cellular Serial Device Servers

Where cabling installation is an issue, ATOP's wireless serial servers provide a rugged, reliable and affordable solid networking solution for Serial and Ethernet conversion, with one or two available ports and terminal block or DB9 connector. Selected versions feature Industrial EMC compatibility, MIMO dual-antenna features and IEEE 802.11 a/b/g/n and 3G/4G/HSPA connectivity.

Industrial Wireless IEEE 802.11 b/g/n Serial Device Server, DIN-Rail

60ºC -10ºC | DIN | WDS | IP30 IEC60529

SKU	RS-232 RS-485 RS-422 TB5	RS-232 RS-485 RS-422 DB9	10/100 RJ45 Ports	Additional features
SW5501C	1	1	1	WPS button
SW5502C-TB	-	2	1	WPS button
SW5502C	2	-	1	WPS button

Industrial Wireless IEEE 802.11 a/b/g/n Serial Device Server, Industrial EMC

60ºC -10ºC | Industrial EMC | DIN | Tx MIMO Rx | WDS | IP30 IEC60529

SKU	RS-232 RS-485 RS-422 TB5	RS-232 RS-485 RS-422 DB9	10/100 1000 RJ45 Ports	Additional features
SW5501	-	1	1	
SW5501-TB	1	-	1	
SW5501-Sis	1	-	1	2 kV isolation
SW5502	-	2	1	
SW5502-TB	2	-	1	
SW5502-Sis	2	-	1	2 kV isolation

Industrial Cellular 4G LTE Serial Gateway and VPN router, Digital I/O, DIN-Rail mount

NEW features! **

-40ºC 70ºC | Industrial EMC | DIN | IP30 IEC60529

SKU	RS-232 RS-485 TB14	RS-232 RS-485 DB9	10/100/ 1000 RJ45 Ports	Digital Inputs/ Digital Outputs	Additional features
SE5901B-D3G	-	1	1	-	
SE5901B-4G	-	1	1	-	
SE5901B-IO-4G	1+1*	-	1	2/2	
SE5901B-IO-4G-GPS	1+1*	-	1	2/2	GPS
SE5901B-4G-B	-	1	1	-	Battery function
SE5901B-IO-4G-B	1+1*	-	1	2/2	Battery function
SE5901B-IO-4G-GPS-B	1+1*	-	1	2/2	GPS / Battery function

* one TB14 sw-selectable RS-485; RS-232 Firewall and DMZ and one RS-232.
** Industrial Advanced Cellular & WiFi Serial Gateway and Router, DIO, DIN-Rail mount, new features include Port-Forwarding, NAT, IPsec, OpenVPN, PPTP and SMS management

Advanced Serial Device Servers

ATOP's advanced serial device servers satisfy rigorous industrial automation requirements. They feature a wider operational temperature range – from -20°C to +70°C, with selected versions featuring a range of -40°C to +85°C. In addition, they feature advanced EMC capabilities and faster CPUs to provide advanced features and faster processing times. They are more suitable for challenging environments. Selected advanced units provide additional gigabit connectivity and Power over Ethernet (PoE), so that ordinary power supplies don't need to be relied on.

Advanced Industrial Serial Device Servers, DIN-Rail Mount

-40ºC 85ºC | Industrial EMC | DIN | IP30 IEC60529

SKU	RS232-RS485-RS422 TB5	RS-232 RS-485 RS-422 DB9	10/100 RJ45 Ports
SE5901-DB	-	1	2
SE5901-TB	1	-	2

* new features include IPsec, OpenVPN, PPTP and RSTP redundancy.

Advanced Industrial Serial Device Servers, DIN-Rail Mount

-40°C 85°C | Industrial EMC | DIN | IP30 IEC60529

SKU	RS-232 RS-485 RS-422 TB5	RS-232 RS-485 RS-422 DB9	10/100 RJ45 Ports	1000 Gigabit	Additional features
SE5904D-DB	-	4	2	-	
SE5904D-TB	4	-	2	-	
SE5904D-SiS	4	-	2	-	3kV isolation
SE5904D-G-DB-SFP	-	4	-	2	
SE5904D-G-TB-SFP	4	-	-	2	
SE5904D-G-Sis-SFP	4	-	-	2	3 kV isolation

Advanced Serial Device Servers, Rack-Mount

-20°C 70°C | RACK | Industrial EMC | IP30 IEC60529

SKU	RS-232 RS-485 RS-422 RJ45	RS-232 RJ45	10/100 RJ45 Ports	Additional features
SE5908-DC	8	-	2	
SE5908-SiS-DC	-	8	2	2.5 kV isolation
SE5916-DC	16	-	2	
SE5916-SiS-DC	-	8	2	2.5 kV isolation
SE5908-EU	8	-	2	
SE5908-US	8	-	2	
SE5916-EU	16	-	2	
SE5916-US	16	-	2	
SE5908-SiS-EU	-	8	2	2.5 kV isolation
SE5908-SiS-US	-	8	2	2.5 kV isolation
SE5916-SiS-EU	-	16	2	2.5 kV isolation
SE5916-SiS-US	-	16	2	2.5 kV isolation

IEC61850-3 – Substation-specific Serial Device Servers

ATOP's Substation serial servers feature: 8 to 16 x Serial ports (RS-232/RS-485/RS-422) with or without isolation; 6 x Ethernet ports with RJ45 or SFP connector; Wide -40°C to +85°C temperature range and are enclosed in a rugged IP30-rated rack-mount housing. Available in two power options: redundant 24−48VDC input or redundant 100−330VDC / 100−240VAC, with additional relay outputs available.

IEC61850-3 Certified Substation Serial Device Server

NEW features! ***

-40°C ▮ 85°C | IEC 61850 | Industrial EMC | MILD-STD 810F RACK | IP30 IEC60529

SKU	RS-232 RS-485 RS-422 TB5	RS-232 RS-485 RS-422 DB9	10/100 RJ45 Ports	100 Mbps SFP Slots	Additional features
SE5908A **	-	8	6	-	
SE5908A-TB **	8	-	6	-	
SE5908A-SiS **	8 *	-	6	-	3kV isolation
SE5908A-6SFP **	-	8	-	6	
SE5908A-6SFP-TB **	8	-	-	6	
SE5908A-6SFP-SiS **	8 *	-	-	6	3kV isolation
SE5916A **	-	16	6	-	
SE5916A-TB **	16	-	6	-	
SE5916A-SiS **	16 *	-	6	-	3kV isolation
SE5916A-6SFP **	-	16	-	6	
SE5916A-6SFP-TB **	16	-	-	6	
SE5916A-6SFP-SiS **	16 *	-	-	6	3kV isolation

* The SiS (3kV isolated) version supports 8 or 16 RS-422/ RS-485
** All versions are available in 24~48VDC or 100~370VDC/100~240VAC power input (add -HV to model name)
*** new features include IPsec, OpenVPN, PPTP and RSTP redundancy.

EN50155 – Railway specific Serial Device Servers

ATOP's railway serial servers support two serial connectivity ports (RS-232/RS-485/RS-422) and one Ethernet port with M12 connectors and are enclosed in a waterproof IP68 housing, provide 15KV ESD protection on serial signals to protect costly and sensitive equipment.

EN50155 Railway Waterproof Serial Device Server

-40°C ▮ 75°C | Industrial EMC | IP68 IEC60529

Pic	SKU	Description	RS232-RS485-RS422 M12	10/100 M12 Ports	Additional features
	SE8502-M12	Waterproof Ethernet to Serial device Server, EN 50155 certified	2	1	
	SE8502-Sis-M12	Waterproof Ethernet to Serial device Server, EN 50155 certified, 2 kV isolation.	2	1	2 kV isolation

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