



## Industrial Media Converters

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# Media Converters *Distance Extension With Higher Immunity*

## Introduction



The media converters have incorporated SUNIX advanced technologies such as the RS-422/485 auto identify & switch, AHDC/CS™ (Auto Hardware Direction Control / Carrier Sense) technology, and auto baud rate detection feature. SUNIX media converter, a specialized equipment for industrial application which can effectively protect your equipment from lightning, electrostatic discharges, high voltage, and ground voltage damage, with features like Surge Protection, Optical Isolation Protection, and Reverse Power Protection. Fiber Ethernet media converters not only extends the distances but also provide features like Link Fault Signaling, which allows application to react to the situation.

## Special Mechanical for Harsh Environments

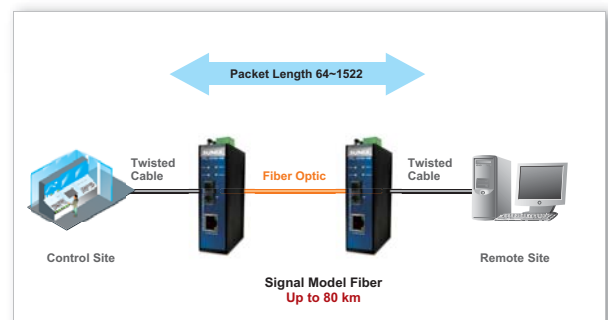
SUNIX designed the converters especially for applications in harsh environment and required to work non-stop. The quality of industrial converter is constantly being tested by rugged conditions, such as high or low temperature conditions, impact, vibration, or corrosion. To cope with demanding industrial environments, the metal case is rigid, shock-proof, and conforms to IP30 design. The compact design with DIN Rail and Wall mount options to adjust any type of installation requirements.

## Auto Baud Rate Detection

SUNIX Media Converters are equipped with the capability to automatically detect the baud rate for the serial interfaces, thus making no more manual settings and hassle free installation. Moreover, no need to worry if needs to change any serial device, which works on different baud rate than the earlier one.

## Application

Serial to fiber media conversion is the key requirement for users who need to extend the RS-232/422/485 transmission distance and increase networking capability. The fiber converters can extends the communication distance up to 80KM and at the same time providing the best solution for an immune, insulated, reliable, and maintainable transmission media.



## Features

- **Redundant power inputs with reverse power protection**
- **RS-422 and RS-485 Auto Detect and Switch technology**
- **SUNIX AHDC/CS™ technology for RS-485 2-wire signal direction control**
- **Extends distances up to 80KM**
- **Benefits of Fiber optics including higher bandwidth, speed, immunity and data integrity**
- **Redundant power 12~48 VDC terminal block & 12 VDC Jack input**



## Fiber Media Converters

Model		FTS-6011 Series	FTD-6011 Series	FTC-6011 Series
Product				
Description		RS-232 to fiber Media Converter	RS-422/485 to fiber Media Converter	RS-232/422/485 to fiber Media Converter
Interface	Serial Port	RS-232 x 1	RS-422/485 x 1	RS-232/422/485 x 1
	Fiber Port	Standard Fiber SC x 1		
Cable Length	Multi-modes	50 / 125 $\mu$ m : Standard 2 km		
	Single-modes	9 / 125 $\mu$ m : Standard 30 km		
Communication	Serial Baud Rate	75 bps up to 921.6 Kbps		
	RS-232 Signals	TxD,RxD,GND	—	TxD,RxD,GND
	RS-422/485 Signals		RS-422: TxD+, TxD-, RxD+, RxD-,GND 4 Wire RS-485: TxD+,TxD-,RxD+, RxD-,GND 2 Wire RS-485: Data+, Data-, GND	
	RS-485 Directional	—	SUNIX AHDC / CS™ Technology	
	Select RS-422/485	—	DIP Switch	
Power	Redundancy	—	Dual Power Inputs	
	Connectors	3-pin Removable Terminal Block + DC Jack		
	Consumption	1A @ 12 VDC		
	Input	12~48VDC (24VDC)		
Protection		Embedded 15KV ESD protection		
Power Reverse		Present		
Casing		Aluminum ( IP30 )		
Mounting Options		DIN Rail and Wall Mountable		
Alarm Contact		1 Configurable Relay output		
Regulatory Approvals	EMC	FCC Part 15, CISPR (EN55022) Class A, CE		
	Safety	UL60950, CAN/CSA-C22.2 No.60950		
	Shock / Vibration	IEC60068-2-27, IEC60068-2-32 / IEC60068-2-6		
Environment	Operation Temperature	Standard 0 °C to 60 °C / Extend - 40 °C to 80 °C		
	Operation Humidity	5% to 95%RH		
	Storage Temperature	- 40°C to 85°C		
Dimensions		30 x 68.5 x 105 mm (W x D x H)		
WARRANTY		5 years		

**Note :** Please contact our sales team for fiber connector types (ST, SC).

## Ethernet Media Converters

Model		FTL-1218H-G Series	FTL-1218H Series
Product			
Description		10/100/1000 Base-T(X) to 1000Base-SX / LX Media Converter	10/100Base-T(X) to 100Base-FX Media Converter
Interface	Serial Port	RJ45 x 1	
	Fiber Port	Standard Fiber SC x 1	
Cable Length	Multi-modes	50 / 125 $\mu$ m: Standard 2 km	
	Single-modes	9 / 125 $\mu$ m: Standard 30 km	
Ethernet		Gigabit	10/100 Base-T(X)
Power	Redundancy	Dual Power Inputs	
	Connectors	5-pin Removable Terminal Block + DC Jack	
	Consumption	1A @ 12 VDC	
	Input	12~48 VDC ( 24 VDC )	
Protection	Power Reverse	Present	
Casing		Aluminum ( IP30 )	
Mounting Options		DIN Rail and Wall Mountable	
Alarm Contact		1 Configurable Relay output	
Regulatory Approvals	EMC	FCC Part 15, CISPR (EN55022) Class A, CE	
	Safety	UL60950, CAN/CSA-C22.2 No.60950	
	Shock / Vibration	IEC60068-2-27, IEC60068-2-32 / IEC60068-2-6	
Environment	Operation Temperature	Standard 0 °C to 60 °C / Extend - 40 °C to 80 °C	
	Operation Humidity	5% to 95%RH	
	Storage Temperature	- 40°C to 85°C	
Dimensions		30 x 68.5 x 105 mm (D x W x H)	
WARRANTY		5 years	

**Note :** Please contact our sales team for fiber connector types (ST, SC).



## Serial Media Converters

Model		STD-1914A Series	STD-1914SA Series	STD-1918H Series	STD-1918H-SI Series
Product					
Description		RS-232 to RS-422/485 compact size Media Converter	RS-232 to RS-422/485 compact size Media Converter with Surge	RS-232 to RS-422/485 Media Converter	RS-232 to RS-422/485 Media Converter with Surge & Isolation
Communication	Port 1	RS-232 (DB9) Female		RS-232 (DB9) Female	
	Port 2	RS-422/485 (4pin Terminal Block)		RS-422/485 (9-pin Terminal Block)	
	Distance	1.2km (RS-422/485)			
	Baud Rate	50 bps up to 460.8Kbps			
	RS-232 Signals	TxD,RxD,RTS,CTS,GND			
Power	Redundancy	—		Dual	
	Connectors	DC Jack		3-pin Removable Terminal Block + DC Jack	
	Consumption	20mA @ 5V		1A @ 12VDC	
	Input	5V		12~48VDC (24VDC)	
Protection	Isolation	—		—	2.5KV
		ESD : 15KV ESD	Surge : 400W for RS-422/485 meets IEC6001-4-5	ESD : 15KV ESD	Surge : 400W for RS-422/485 meets IEC6001-4-5
	Power Reverse	—		Present	
Casing		Plastic		Aluminum IP30	
Regulatory Approvals	EMC	FCC Part 15, CISPR (EN55022) Class A, CE			
	Safety	—		UL60950, CAN/CSA-C22.2 No.60950	
	Shock / Vibration	IEC60068-2-27, IEC60068-2-32 / IEC60068-2-6			
Environment	Operation Temperature	0 °C to 60 °C		Standard 0 °C to 60 °C / Extend - 40 °C to 80 °C	
	Operation Humidity	5% to 95%RH			
	Storage Temperature	- 20°C to 85°C		- 40°C to 85°C	
Dimensions		46 x 76 x 23 mm (D x W x H)		30 x 68.5 x 105 mm (D x W x H)	
WARRANTY		5 years			