



## &gt; PROTECTION FOR DATA AND TELECOMMUNICATION LINES

## &gt; ATLINE SERIES

## &gt; ATLINE

Modular overvoltage protector for data lines for DIN rail



- > AT-9205 ATLINE 5: 5 V<sub>DC</sub> lines
- > AT-9212 ATLINE 12: 12 V<sub>DC</sub> lines
- > AT-9215 ATLINE 15: 15 V<sub>DC</sub> lines
- > AT-9224 ATLINE 24: 24 V<sub>DC</sub> lines
- > AT-9230 ATLINE 30: 30 V<sub>DC</sub> lines
- > AT-9248 ATLINE 48: 48 V<sub>DC</sub> lines
- > AT-9260 ATLINE 60: 60 V<sub>DC</sub> lines
- > AT-9280 ATLINE 80: 80 V<sub>DC</sub> lines
- > AT-9210 ATLINE 110: 110 V<sub>DC</sub> lines

Effective protection for **data lines**, in modules with **medium and tight coordinated** protection for two pair of lines.

- > Protection for data lines and the digital or analogical equipment connected to them (computers, PLCs, load cells etc.).
- > Wide variety of protectors for different working voltages.
- > Both common and differential protection recommended for this type of line.
- > Connects up to two pairs of lines that are very small in size (0.75 DIN modules).
- > Includes removable module that can be replaced in the event of a breakdown or fault without needing to disconnect the wiring. The power supply is not interrupted when replacing the module.
- > It has a radiofrequency receptor in order to carry out maintenance using only an emitter kit. When the RF SPD Tester is applied and the protector is working, the LED flickers green. If the cartridge is damaged, the LED does not light up.
- > Earthing system is introduced through a metal sheet opposite to the fixing on the DIN rail.
- > In normal conditions, it remains inactive without affecting line operation or producing any leakages.
- > Discharge takes place in internal encapsulated elements with no external flash.
- > Low residual voltage for all operating voltages.
- > Very fast response time.
- > Mechanical connection of conductors using screws, in order to absorb a higher amount of overvoltage.

ATLINE protectors have been tested in **official and independent laboratories**, obtaining their characteristics according to relevant standards (shown in the table).



**Connection to earth is a must.** Earthing in the whole installation must be bonded either directly or by a spark gap and resistance should be lower than 10 Ω. If the indications on this datasheet are not fulfilled during use or installation of the protectors, the protection provided by this device could be compromised.

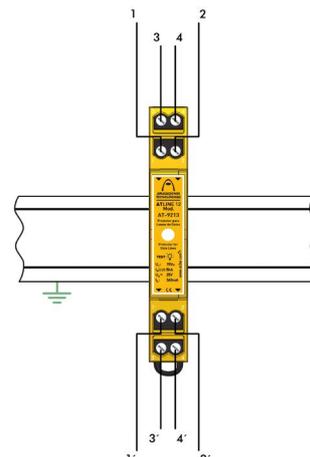
## &gt; INSTALLATION

It is recommended that installation is carried out **as close as possible to the equipment**. One communication cable or data line may contain several wires. Each ATLINE can protect up to four of these wires **in series**. It is very important to know **the working voltage, current and function of each wire precisely** in order to select the proper protector.

When the 2 devices to be protected are placed in **different buildings and interlinked**, protectors should be placed on both sides of the line.

**The recommended installation procedure** is the following:

- 1 Cut the data cable.
- 2 Insert the cable ends into the connectors. Carefully check that the input and output connections are correctly placed.
- 3 Connect the DIN rail to the earth terminal, since the overvoltage will be diverted to this element.





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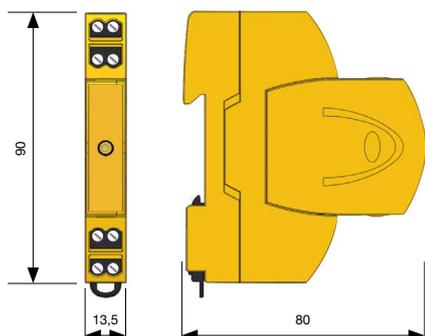
#### > TECHNICAL DATASHEET

Reference:		ATLINE5 AT-9205	ATLINE12 AT-9212	ATLINE15 AT-9215	ATLINE24 AT-9224	ATLINE30 AT-9230
Nominal voltage:	$U_n$	5 V <sub>DC</sub>	12 V <sub>DC</sub>	15 V <sub>DC</sub>	24 V <sub>DC</sub>	30 V <sub>DC</sub>
Maximum continuous operating voltage:	$U_c$	7 V <sub>AC, DC</sub>	15 V <sub>AC, DC</sub>	18 V <sub>AC, DC</sub>	31 V <sub>AC, DC</sub>	37 V <sub>AC, DC</sub>
Nominal discharge current per line C2 4 kV (1.2/50 $\mu$ s) / 2 kA (8/20 $\mu$ s):	$I_n(C2)$			2 kA		
Total nominal discharge current C2 4 kV (1.2/50 $\mu$ s) / 2 kA (8/20 $\mu$ s):		8 kA				
Protection level (1.2/50 $\mu$ s):	$U_p$	66 V			70 V	
Nominal current:	$I_n$	360 mA				
Series resistance:	$R_s$	15 $\Omega$				
Response time:	$t_r$	< 10 ns				
Protector location:		Indoor				
Type of connection:		Series (two ports)				
No. of poles:		4				
Working temperature:	$\vartheta$	-40 °C to +70 °C				
Dimensions:		13.5 x 90 x 80 mm (0.75 modules DIN 43880)				
Fixing:		DIN Rail				
Enclosure material:		Polyamide				
Enclosure protection:		IP20				
Insulation resistance:		> 10 <sup>14</sup> $\Omega$				
Self-extinguishing enclosure:		V-0 Type according to UNE-EN 60707 (UL94)				
Connections:		4 mm <sup>2</sup> maximum section				

Certificated tests according to: UNE-EN 61643-21

Relevant standards: UNE 21186, NF C 17-102, IEC 62305

#### DIMENSIONS (MM)



#### > ACCESSORIES

- > AT-9206 ATLINE 5 Mod.: 5V<sub>DC</sub> lines
- > AT-9213 ATLINE 12 Mod.: 12V<sub>DC</sub> lines
- > AT-9216 ATLINE 15 Mod.: 15V<sub>DC</sub> lines
- > AT-9225 ATLINE 24 Mod.: 24V<sub>DC</sub> lines
- > AT-9231 ATLINE 30 Mod.: 30V<sub>DC</sub> lines





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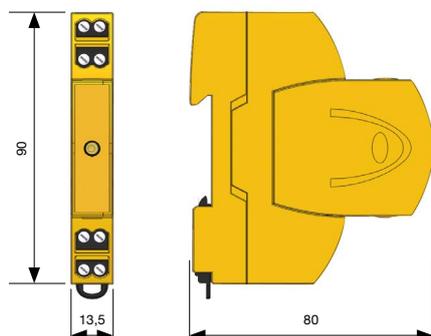
## &gt; TECHNICAL DATASHEET

Reference:		ATLINE48 AT-9248	ATLINE60 AT-9260	ATLINE80 AT-9280	ATLINE110 AT-9210
Nominal voltage:	$U_n$	48 V <sub>DC</sub>	60 V <sub>DC</sub>	80 V <sub>DC</sub>	110 V <sub>DC</sub>
Maximum continuous operating voltage:	$U_c$	65 V <sub>AC, DC</sub>	72 V <sub>AC, DC</sub>	96 V <sub>AC, DC</sub>	132 V <sub>AC, DC</sub>
Nominal discharge current per line C2 4 kV (1.2/50 $\mu$ s) / 2 kA (8/20 $\mu$ s):	$I_n(C2)$	2 kA			
Total nominal discharge current C2 4 kV (1.2/50 $\mu$ s) / 2 kA (8/20 $\mu$ s):		8 kA			
Protection level (1.2/50 $\mu$ s):	$U_p$	100 V	120 V	140 V	160 V
Nominal current:	$I_n$	360 mA			
Series resistance:	$R_s$	15 $\Omega$			
Response time:	$t_r$	< 10 ns			
Protector location:		Indoor			
Type of connection:		Series (two ports)			
No. of poles:		4			
Working temperature:	$\vartheta$	-40 °C to +70 °C			
Dimensions:		13.5 x 90 x 80 mm (0.75 modules DIN 43880)			
Fixing:		DIN Rail			
Enclosure material:		Polyamide			
Enclosure protection:		IP20			
Insulation resistance:		> 10 <sup>14</sup> $\Omega$			
Self-extinguishing enclosure:		V-0 Type according to UNE-EN 60707 (UL94)			
Connections:		Maximum section 4 mm <sup>2</sup>			

Certificated tests according to: UNE-EN 61643-21

Relevant standards: UNE 21186, NF C 17-102, IEC 62305

## &gt; DIMENSIONS (MM)



## &gt; ACCESSORIES



- > AT-9249 ATLINE 48 Mod.:48 V<sub>DC</sub> lines
- > AT-9261 ATLINE 60 Mod.:60 V<sub>DC</sub> lines
- > AT-9281 ATLINE 80 Mod.:80 V<sub>DC</sub> lines
- > AT-9211 ATLINE 110 Mod.:110 V<sub>DC</sub> lines