

## Model 485 series



### Features

- Industry standard serial converters
- UK designed & manufactured
- Optical isolation available
- Automatic turnaround feature on MA485F9
- Automatic data-rate detection
- RS485 screw terminal connectors for easy wiring
- Selectable 120 Ohm termination resistor

### Description

Since the Model 485 was first introduced by Amplicon over 20 years ago, thousands have been successfully installed by customers wishing to convert RS232 to RS422 or RS485 compliant signals.

Used in pairs, they can extend RS232 connections up to 1.2km. Used individually they convert an industry standard RS232 port to an RS422/485 port and vice-versa.

#### Model 485HF9

This model provides basic electrical signal level conversion from RS232 to RS422 or 4 wire RS485. For 2-wire RS485 applications, transmission control can be managed by toggling the RTS line or an external signal.

#### Model MA485F9

The 'Magic' converter features an automatic line turnaround facility, allowing full duplex RS232 connections to connect directly to a half duplex 2-wire RS485 bus without a requirement for software based transmission control.

#### Model 485F9i

The 485F9i operates in the same way as the 485HF9 with the addition of optical isolation on the data lines. This prevents ground loop errors in noisy electrical environments or where earth potential differences may exist at either end of the connection.

NB – To operate the optical isolation, the unit must source power from the handshaking lines of the RS232 port.

### Specification

<b>RS232 connector</b>	DB9 female			
<b>RS485 connector</b>	Screw terminal			
<b>Supply voltage</b>	9 to 12Vdc	<b>Operating temperature</b>	0 to +60°C	
<b>Power connector</b>	Screw terminal	<b>Storage temperature</b>	-20 to +70°C	
<b>Operating current</b>	100mA maximum	<b>Dimensions</b>	67 x 43 x 20mm (67 x 53 x 20mm Magic 485)	
<b>Data rate</b>	115.2kbps (1Mbps on 485HF9)	<b>Weight</b>	60g	

### Models available

Non-isolated					
Model	Max baud rate	Automatic turnaround	RS232 connector	RS485 connector	
485HF9	1Mbps	no	DB9 female	Screw terminal	
MA485F9	115.2kbps	yes	DB9 female	Screw terminal	
Isolated					
Model	Max baud rate	Automatic turnaround	RS232 connector	RS485 connector	
485F9i	115.2kbps	no	DB9 female	Screw terminal	