

# TBS07-TBS10 SDI-12 Range Extenders

The TBS07DR and TBS10DR are used together in order to extend the distances over which SDI-12 sensors can be connected.

## SDI-12 and RS485

SDI-12 has grown to become the dominant protocol in use within the environmental sectors. It is robust, easy to use and simple to implement. However to keep the protocol free of heavy overheads and error correction, the transmission distance is limited to 200m.

RS485 is a standard used in the transmission of all kinds of data (including with MODBUS sensors). It achieves long transmission distances by sending data over a twisted pair cable - which gives high noise immunity.

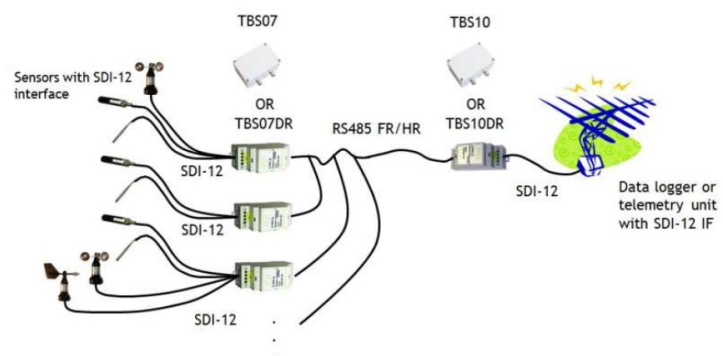
If the simplicity of SDI-12 is combined with the range of RS485, the best of both world's can be had.

## TBS07DR and TBS09DR

When used together, the TBS07DR and TBS10DR do just that.

The TBS07DR is a converter which converts the signals from an SDI-12 logger or telemetry unit, to RS485 format (at a speed of 19200 bps). They can then be sent over long distances, using a twisted pair cable.

At the remote end, the TBS10DR receives the RS485 information and converts it back to the standard SDI-12 signalling levels and speed. A 12V DC power supply is required at the remote end to power the converter and sensors.



## Ordering

TBS07DR                      TBS07DR SDI-12 to RS485 Converter  
TBS10DR                      TBS10DR RS485 to SDI-12 converter

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