

Two Channel RS-485/RS-422 to Current Loop Converter Model 485CL

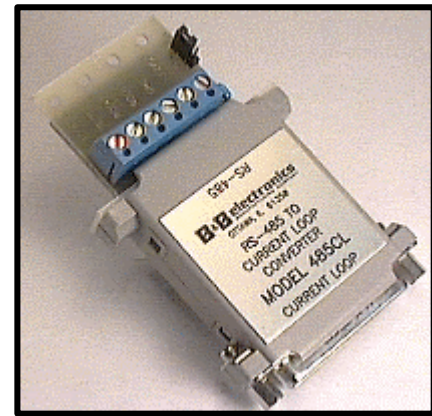
The Model 485CL is a two-channel RS-485/RS-422 to current loop converter. This converter can be used with RS-422 or RS-485 (2 or 4-wire). An external jumper determines whether the RS-485/RS-422 receiver is always enabled (ECHO ON, for RS-422 & 4-wire RS-485) or if the receiver is disabled when data is being transmitted (ECHO OFF). Terminal blocks are provided for connections on the RS-485/RS-422 side. The current loop side of the converter has a female DB-25S connector. A 12 Vdc power supply is required for the RS-485/RS-422 side. To maintain optical isolation this should not be the same power supply used to supply the current source.

The RS-485/RS-422 driver is enabled automatically when data is received on the current loop side of the converter. The driver is disabled 8.33 milliseconds, one character at 1200 baud, after data transmission is complete. This timeout can be altered by changing the values of R6 and C2. See Table 1 for specific values.

Table 1

| Baud Rate | Time (ms) | Resistor R6 (Ohms) | Capacitor C2 (μ F) |
|-----------|-----------|--------------------|-------------------------|
| 300 | 33.3 | 33K | 1 |
| 600 | 16.6 | 16K | 1 |
| 1200* | 8.33 | 82K* | 0.1* |
| 2400 | 4.16 | 43K | 0.1* |
| 4800 | 2.08 | 20K | 0.1* |
| 9600 | 1.04 | 10K | 0.1* |
| 19.2K | 0.52 | 5.6K | 0.1* |

* Factory default value



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