

# 2500-RBC

## Profibus Remote Base Controller



### Description

The 2500-RBC Profibus Remote Base Controller (RBC) allows a CTI 2500 Series® or Simatic® 505 I/O base to function as a slave node on a Profibus DP I/O channel that complies with the PROFIBUS standard. The Remote Base Controller is intended to be a replacement for the Siemens® 505-6870 RBC.

### Features

- ◁ Replaces Siemens® 505-6870
- ◁ Compatible with CTI 2500 Series, Simatic® 505, Siemens® S5® and S7®, as well as other Profibus masters
- ◁ Can be used in all 4, 8, and 16 slot CTI and Siemens® bases
- ◁ Supports communication speeds from 9600 baud (max cable distance per segment: 1200m) up to 12 Mbaud (max cable distance per segment: 100m)
- ◁ Supports all CTI and Siemens® discrete and analog I/O modules
- ◁ GSD file is provided with the RBC to allow configuration by WORKSHOP or COMPROFI
- ◁ LED display for error codes and station address

### Specifications

#### Ports:

Profibus 9-pin female, pins 2,7 no connect

#### Profibus Baud Rates:

9600, 19.2K, 93.75K, 187.5K, 1.5M, 3.0M, 6.0M, 12M

**Profibus Port Isolation:** 1500VDC

#### Output State Selection:

Determines state of outputs when I/O channel communication is lost:

|        |                                   |
|--------|-----------------------------------|
| off    | all outputs are turned off        |
| freeze | all outputs hold their last value |

#### Dipswitch Options:

Serial port baud rate (future use)  
RBC station address  
Status display mode

#### Software-Set Parameters:

Discrete I/O interval  
Word I/O update factor  
Ignore mismatch mode  
RS232 port enable/disable

#### Diagnostic Data:

Station status (3 bytes)  
Master address (1 byte)  
Ident number (1 byte)  
Extended diagnostics (9 bytes)

**Backplane Power:** 2 Watts (maximum)

**Module Size:** Double-wide

#### Operating Temperature:

0 to 60 C (32 to 140 F)

#### Storage Temperature:

-40 to 85 C (-40 to 185 F)

**Relative Humidity:** 5% to 95% (non-condensing)

#### Agency Approvals Pending:

UL, UL-Canada, Class 1 Div 2, CE

**Shipping Weight:** 1.5 lb. (0.68 Kg)



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