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Find the *Rockwell / Allen-Bradley 1745-E151* at our website: *Click HERE*

Installation Instructions
1746 SLC Backplane Module, Industrial Product Range
54RF-IN-46F, 54RF-IN-46G, 55RF-IN-46 and 56RF-IN-46

IMPORTANT: SAVE THESE INSTRUCTIONS FOR FUTURE USE.



Description

Allen-Bradley 54RF, 55RF and 56RF 1746 SLC Backplane Modules provide integration of RFID transceivers with the Allen-Bradley SLC 500. The 1746 SLC Backplane Modules and RFID transceivers must be of the same product family—54RF, 55RF, or 56RF.

Allen-Bradley 54RF, 55RF, and 56RF 1746 SLC Backplane Modules are RFID plug-in modules for the Allen-Bradley SLC500 programmable controller. The 1746 SLC Backplane Module allows the PLC to interface with the complete line of Allen-Bradley passive RFID tags. Each module controls up to two transceivers. Each transceiver operates independently and simultaneously of each other. The Allen-Bradley 1746 SLC Backplane has two RS-232 serial ports. One serial port is used to send and receive data. The second serial port provides the ability to upgrade the flash program memory.

The 1746 SLC Backplane Module appears as a specialty I/O interface module to the SLC. The 1746 SLC Backplane Module receives internal 5V DC circuitry power from the backplane chassis. An external 24V DC regulated power supply is required for the RFID transceivers and serial port communications. External hardware devices are optically isolated from internal backplane support circuits.

Features

- LED status indications for module status, module power, serial port communications, tag presence, transceiver/tag fault, and command execution
- User RS-232 serial port
- Flash upgrade serial port
- Battery backed SRAM memory
- Controls up to two transceivers
- Easy to use instruction set

Specifications

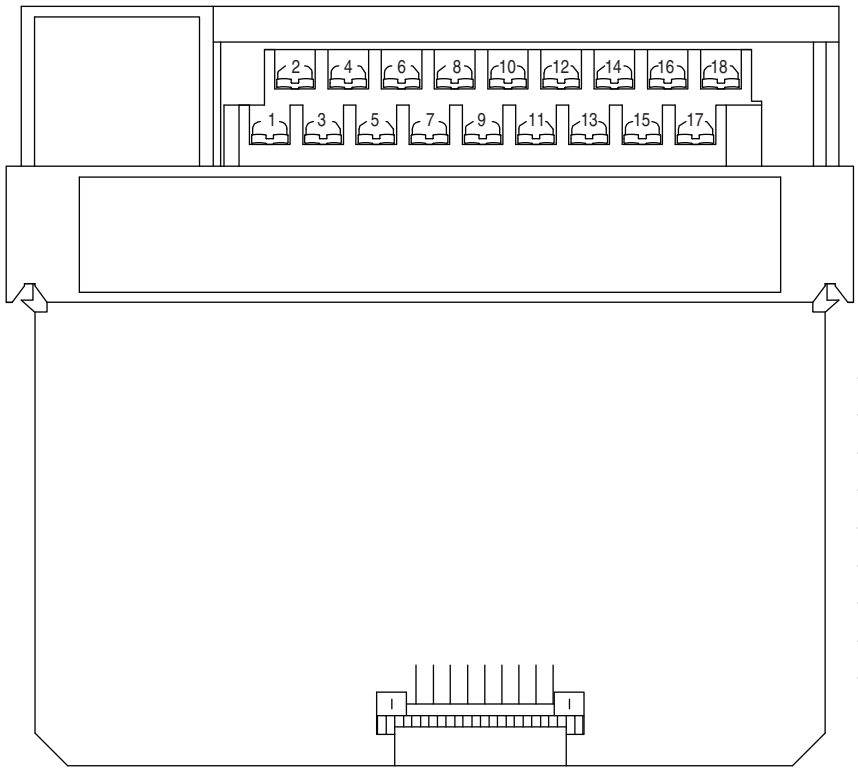
Certifications	CE Marked for all applicable directives
Power Supply	24V DC (±2%)
Power Consumption	350 mA w/ transceivers 200 mA w/o transceivers
Weight [g (oz)]	750 (26.4)
Operating Temperature—C (F)	0…50 ° (32…122 °)

Transceiver Compatibility

Cat. No.	Description
54RF-TR-ERC	Compact Industrial
54RF-TR-ERD	Multi-tag Version
54RF-TR-ERE	Multi-tag Version
55RF-TR-ECB	High Speed Industrial
55RF-TR-ECC	High Speed Industrial
55RF-TR-ECD	High Speed Industrial
56RF-TR-EFE	Front Adjustable
56RF-TR-EFF	Front Adjustable

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Pinouts and Color Codes



1 - User Output RS-232 Tx1
2 - Flash Output RS-232 Tx2
3 - User Signal Ground
4 - Flash Signal Ground
5 - User Input RS-232 Rx1
6 - Flash Imput RS-232 Rx2
7 - Ch. 2 T/R Output (White-S)
8 - Ch. 1 T/R Output (White-S)
9 - Ch. 2 T/R Input (Blue-E)
10 - Ch. 1 T/R Input (Blue-E)
11 - Ch. 2 T/R 0V DC (Black-O)
12 - Ch. 1 T/R 0V DC (Black-O)
13 - Ch. 2 T/R +24V DC (Brown-V)
14 - Ch. 1 T/R +24V DC (Brown-V)
15 - Ch. 2 T/R Shield (Bare)
16 - Ch. 2 T/R Shield (Bare)
17 - BI-1746 +24V DC
18 - BI1746 0V DC

Color Code refers to cabling for this device only.

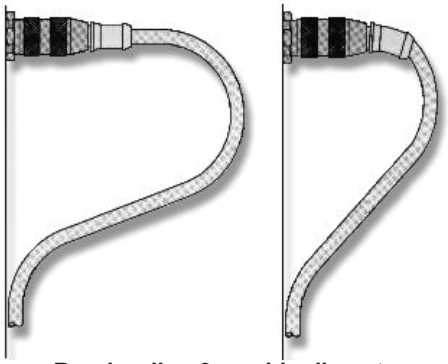
Cabling and Accessories (Sold Separately)

Transceiver cable: 57RF-DF**
** Indicates cable length.

Standard cable lengths are 2 or 5 m and 25, 50, or 100 ft.

Contact Rockwell Automation for other lengths not listed.

Only hand tighten cables:

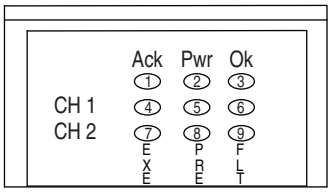


Bend radius 3 x cable diameter.

Technical Information

- Mounts directly in SLC-500 rack
- Two transceiver channels
- Two serial connections
- 24V DC (±2%)

Status LEDs



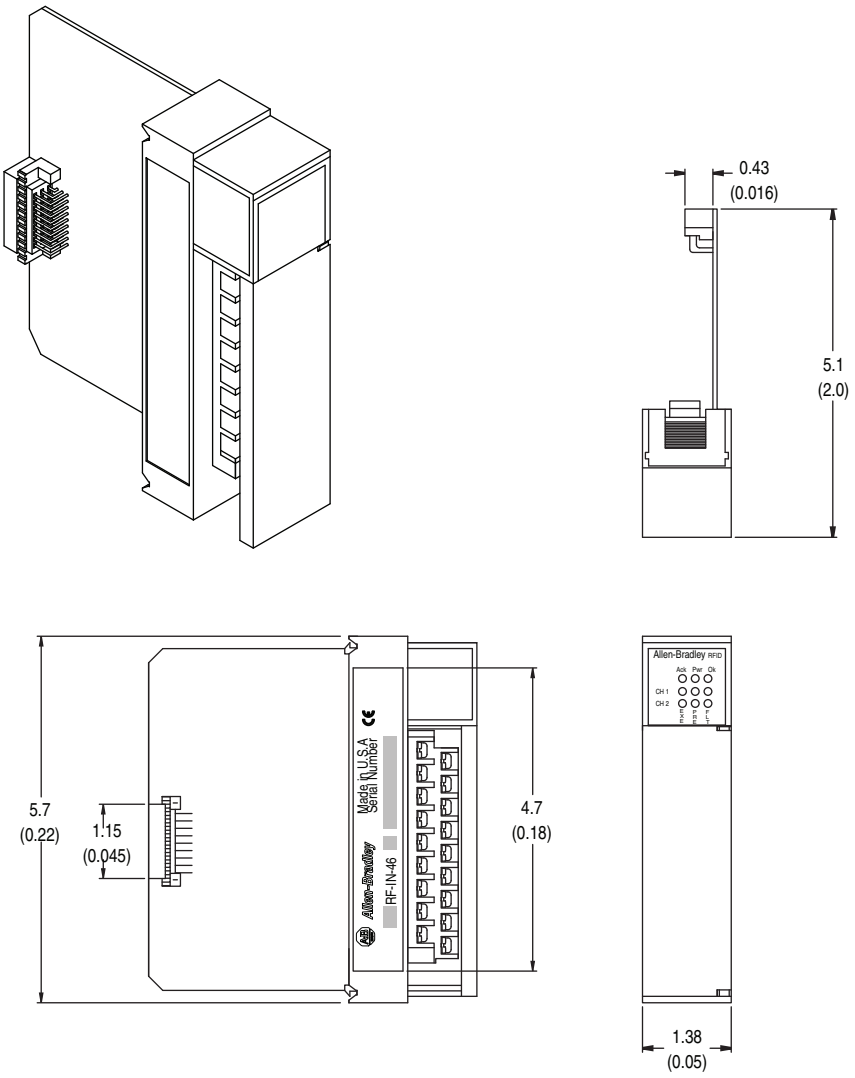
1 - Ack = Status of User Serial Port
2 - Power
3 - Ok = Status of Module
4 - Ch. 1 Execution
5 - Ch. 1 Tag Presence
6 - Ch. 1 Fault
7 - Ch. 2 Execution
8 - Ch. 2 Tag Presence
9 - Ch. 2 Fault

Frequently Asked Questions

Reference the product manuals for more specific installation and configuration information. Manuals are available at www.ab.com/rfid.

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Approximate Dimensions [mm (in.)]



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Power, Control and Information Solutions Headquarters

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444
Europe/Middle East/Africa: Rockwell Automation, Vorstlaan/Boulevard du Souverain 36, 1170 Brussels, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640
Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

Drawing No. 10000019093 Ver 01
November 2008
Printed in USA

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