

Remote I/O Series
PC CONFIGURATOR SOFTWARE
Model: RCFG

Users Manual

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1. INTRODUCTION

1.1 GENERAL DESCRIPTION

The RCFG is used to program parameters for the Power/Network and I/O Modules of the Remote I/O (referred hereunder as 'device'). The following major functions are available:

- Edit parameters
- Download parameters to the device, upload parameters from the device
- Save parameters as files, read parameters from files

1.2 APPLICABLE DEVICES

The RCFG is applicable to the following products:

If not in the table, the latest software and operation manual corresponding to your device are downloadable at our web site.

1.2.1 R8CFG

• Remote I/O R8 Series

FUNCTION	MODEL
Power/Network Module for Modbus	R8-NM1
Power/Network Module for EtherCAT	R8-NECT1
Power/Network Module for DeviceNet	R8-ND1
Power/Network Module for DeviceNet	R8-ND2
Power/Network Module for CC-Link	R8-NC3
Power/Network Module for CC-Link	R8-NC3A
Power/Network Module for EtherNet/IP	R8-NEIP1
Discrete input, 4 points	R8-DA4A
Discrete input, 8 points	R8-DAT8A2
Discrete input, 8 points	R8-DAT8B2
Transistor input (NPN), 16 points	R8-DAM16A
Transistor input (NPN), 16 points	R8-DAT16A2
Transistor input (PNP), 16 points	R8-DAT16B2
Transistor output (NPN), 4 points	R8-DC4A
Transistor output (NPN), 4 points	R8-DC4A2
Photo MOSFET relay output, 4 points	R8-DC4C
Relay output, 4 points	R8-DCT4D
Transistor output (NPN) with short circuit protection, 8 points	R8-DCT8A2
Transistor output (PNP) with short circuit protection, 8 points	R8-DCT8B2
Transistor output (NPN), 16 points	R8-DCM16A
Transistor output (NPN) with short circuit protection, 16 points	R8-DCT16A2
Transistor output (PNP) with short circuit protection, 16 points	R8-DCT16B2
Transistor output (NPN) with full interlock, 16 points	R8-DCM16ALZ
Transistor output (NPN) with full and individual interlock, 16 points	R8-DCM16ALK
Transistor output (NPN) with full and partial interlock, 16 points	R8-DCM16ALH
Transistor output (NPN) with short circuit protection; 32 points	R8-DCM32B2
DC current input (isolated), 2 points	R8-SV2
DC voltage input (non-isolated), 4 points	R8-SV4N
DC current output (isolated), 8 points	R8-SVT8
DC current input (isolated), 2 points	R8-SS2
DC current input (non-isolated), 4 points	R8-SS4N
DC current input (built-in excitation, non-isolated), 4 points	R8-SS4NJ
DC current input (isolated), 8 points	R8-SST8
DC current/voltage input (built-in excitation, non-isolated), 4 points	R8-FST4N
DC current/voltage input (built-in excitation, non-isolated), 16 points	R8-FS16N
DC voltage output (non-isolated), 4 points	R8-YV4N
DC voltage output (non-isolated), 4 points	R8-YVM4N
DC voltage output (non-isolated), 4 points	R8-YVT4N
DC current output (isolated), 2 points	R8-YS2
DC current output (built-in excitation, non-isolated), 2 points	R8-YS2NJ
DC current output (non-isolated), 4 points	R8-YST4N
RTD input (non-isolated), 4 points	R8-RS4N
Thermocouple input (isolated), 2 points	R8-TS2
AC current input (non-isolated), 4 points	R8-CT4E
Totalized pulse input, 4 points	R8-PA4
High-speed totalized pulse input, 4 points	R8-PA4F
Totalized pulse output, 4 points	R8-PC4A

FUNCTION	MODEL
Temperature control module	R8-TC2

1.2.2 R30CFG

• Remote I/O R30 Series

FUNCTION	MODEL
EtherCAT Interface Module	R30NECT1
CC-Link IE Field Interface Module	R30NCIE1
Modbus/TCP Interface Module	R30NE1
Network Module for OPC UA server	R30NOUA1
CC-Link IE TSN Interface Module	R30NCIT1
Discrete Input Module, 16 points	R30XN16A
Discrete Output Module, 16 points	R30YN16A
Discrete Output Module, 16 points	R30YN16C
DC Voltage/Current Input Module, 2 points	R30SV2
DC Voltage/Current Input Module, 4 points	R30SV4
High-speed DC Voltage/Current Input Module, 4 points	R30SVF4
Universal Input Module, 2 points	R30US2
Universal Input Module, 4 points	R30US4
DC Voltage Output Module, 4 points	R30YV4
DC Current Output Module, 4 points	R30YS4
Thermocouple Input Module, 4 points	R30TS4
RTD Input Module, 4 points	R30RS4
Potentiometer Input Module, 4 points	R30MS4
AC Current Input Module, 4 points	R30CT4E
Totalized Pulse Input Module, 2 points	R30PA2
CC-Link IE Field Network Interface Module	R30GCIE1
EtherCAT Interface Module	R30GECT1

1.2.3 R80CFG

• Remote I/O R80 Series

FUNCTION	MODEL
Power/Network Module for EtherCAT	R80NECT1
Power/Network Module for EtherNet/IP	R80NEIP1
Power/Network Module for CC-Link IE TSN	R80NCIT1
Power/Network Module for DeviceNet	R80ND2
Discrete Input Module, 8 points	R80DAT8A
Discrete Input Module, 16 points	R80DAT16A2
Discrete Output Module, 4 points	R80DCT4D
Discrete Output Module, 8 points	R80DCT8A
Discrete Output Module, 16 points	R80DCT16A2
Universal Input Module, 4 points	R80UST4
DC Voltage / Current Input Module, 4 points	R80FST4NJ
DC Current Output Module, 4 points	R80YST4N
DC Voltage Output Module, 4 points	R80YVT4N

1.3 NETWORK DEVICE PROFILE

To use the network device profile, unzip the appropriate zip file.

Note: Use the same network device profile with the R30NECT1 for the R30GECT1.

1.4 PC REQUIREMENTS

The following PC performance is required for adequate operation of the RCFG.

PC	IBM PC compatible
OS	Windows 10 (32-bit, 64-bit), Windows 11 (64-bit) The software may not operate adequately in certain conditions.
CPU	Must meet the relevant Windows' requirements.
Memory	Must meet the relevant Windows' requirements.
Network port	COM port (COM1 through COM16)

One of the following PC Configurator Cables is also required to connect the device to the PC.

R8CFG	MCN-CON or COP-US
R30CFG	Commercially available USB cable (Type A Mini B)
R80CFG	Commercially available USB cable (Type A Mini B)

1.5 DRIVER SOFTWARE

A Driver Software is required to install on a PC where the RCFG is installed in order to connect the RCFG to the device. A FTDI's chip is used for the Interface Module. The dedicated driver software installed on the PC will add a new serial port. Select this port as COM.

1.5.1 INSTALLING DRIVER SOFTWARE

- With a PC connecting to the Internet, the USB Driver is automatically installed with the function of Windows.
- Update in connecting to the Interface Module.
- The USB Driver is downloadable at our web site.

1.6 INSTALLING & DELETING THE PROGRAM

INSTALL

The program is provided as compressed archive. Decompress the archive and execute 'setup.exe' to start up the RCFG installer program. Follow instructions on the Windows.

Log on as administrator to start installation.

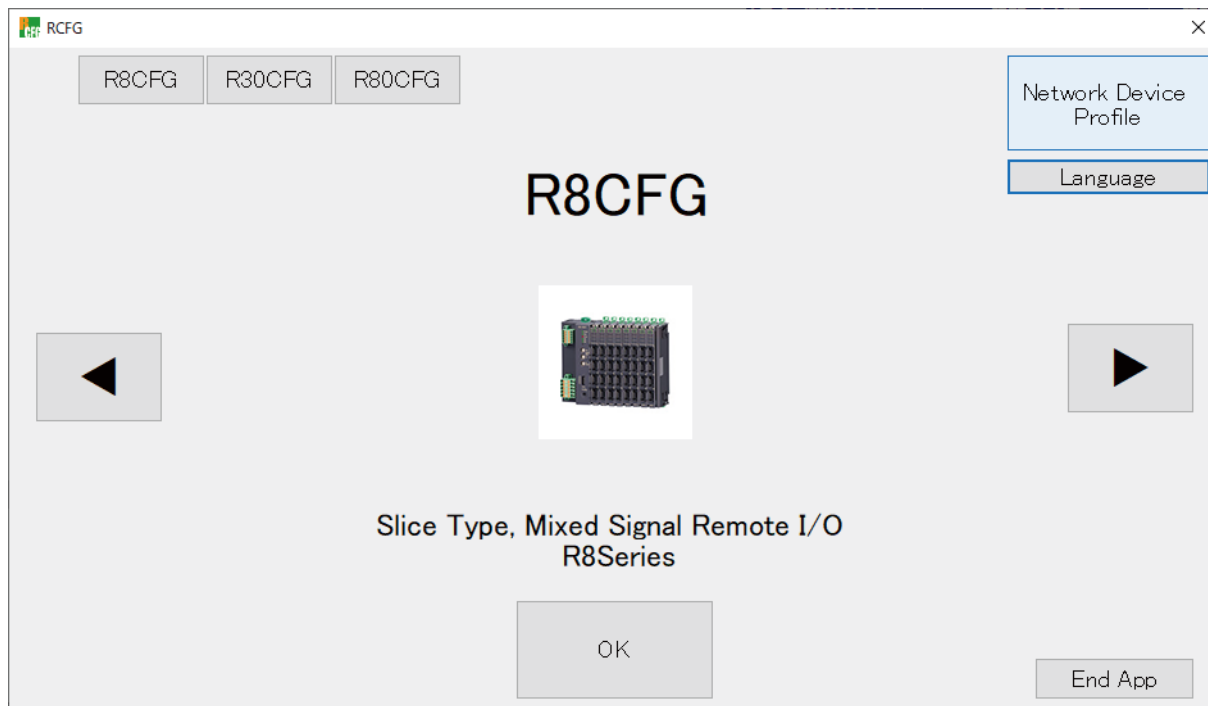
DELETE

Open Settings from Start menu > Apps. > Apps & Features. Click the RCFG on the program list and then follow the Windows instructions.

2. BASIC OPERATION

2.1 SCREEN STRUCTURE

Open the RCFG program on the Windows PC. The following window appears on the screen.

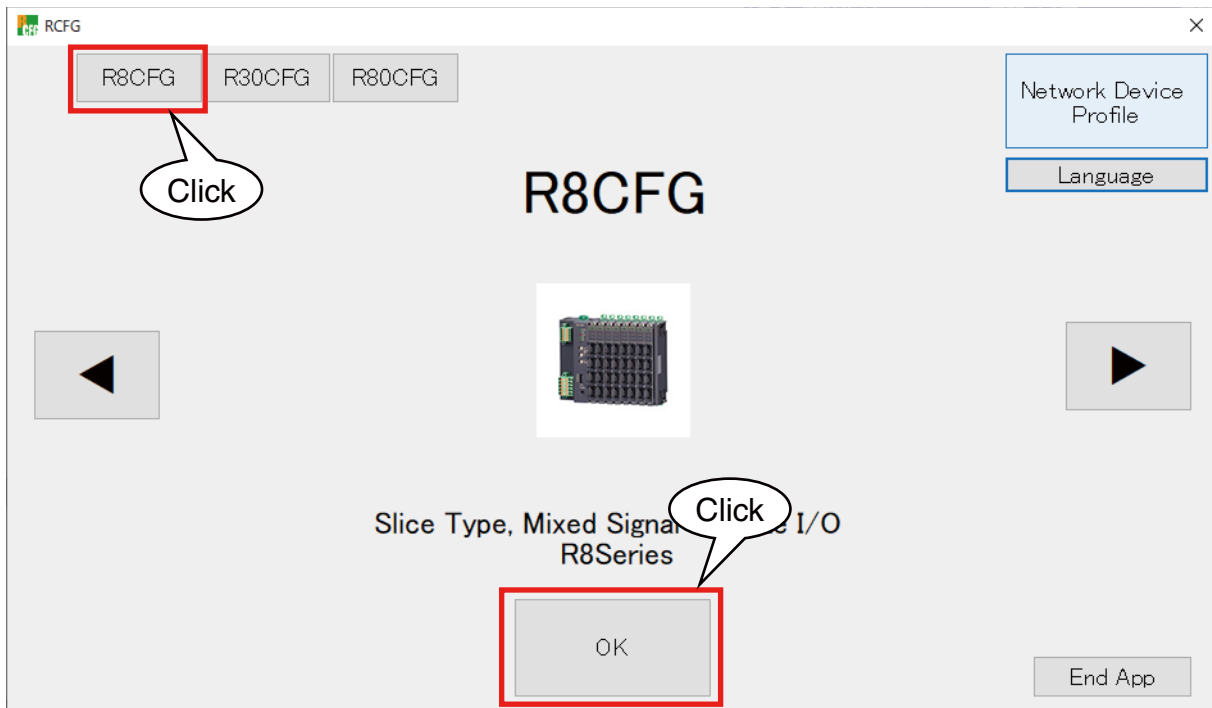


■ OPERATION PANEL

<R8CFG> button	: Displays applicable devices of the R8CFG.
<R30CFG> button	: Displays applicable devices of the R30CFG.
<R80CFG> button	: Displays applicable devices of the R80CFG.
<OK> button	: Displays the setting screen of the selected series.
<◀> button	: Switches the series.
<▶> button	: Switches the series.
<Network Device Profile> button	: Displays network device profile.
<Language> button	: Displays language screen.
<End> button	: End the RCFG.

2.2 SELECT SERIES

Determine the series to use and click OK to display the setting screen.



For the detailed setting procedure, refer to the following users manual.

R8CFG	Remote I/O R8 Series PC CONFIGURATOR SOFTWARE (Model: RCFG-R8CFG)	EM-9178-J
R30CFG	Remote I/O R30 Series PC CONFIGURATOR SOFTWARE (Model: RCFG-R30CFG)	EM-9178-L
R80CFG	Remote I/O R80 Series PC CONFIGURATOR SOFTWARE (Model: RCFG-R80CFG)	EM-9178-M

3. OTHERS

3.1 VERSION HISTORY

- Ver.23.08.10.0 First Edition
- Ver.23.11.28.0 Changes due to update of RCFG-R8CFG (Ver.3.20.0 Ver.3.20.1)
- Ver.24.03.07.0 Changes due to update of RCFG-R80CFG (Ver.3.3.16 Ver.3.4.18)