## **Remote I/O R30 Series**

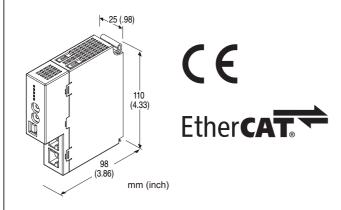
# **NETWORK MODULE**

#### (EtherCAT)

#### **Functions & Features**

• Free combination of analog and discrete I/O

EtherCAT® is a registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.



# MODEL: R30NECT1[1]

### **ORDERING INFORMATION**

• Code number: R30NECT1[1] Specify a code from below for [1].

- (e.g. R30NECT1/Q)
- Specify the specification for option code /Q (e.g. /C01)

# [1] OPTIONS

blank: none
/Q: With options (specify the specification)

### **SPECIFICATIONS OF OPTION: Q**

COATING (For the detail, refer to M-System's web site.) /C01: Silicone coating /C02: Polyurethane coating /C03: Rubber coating

### CAUTION

Installing R3 series I/O module by using installation base for R3 I/O module extension use (model: R30EBS) is available with firmware version 1.4.x or later.

The internal bus communication period for R3 series I/O modules installed in R30EBS is as follows.

Internal bus communication period = 6 msec. x number of



I/O module + 10 msec. (Data update period of main CPU)

Example: Four R3 series I/O modules 6 msec. x 4 + 10 msec. = 34 msec. Even R30EBS is installed, the internal bus communication period of R30 series remains approx. 1 msec.

### **RELATED PRODUCTS**

#### ESI file

(downloadable at M-System's web site.)

### **GENERAL SPECIFICATIONS**

#### Connection

EtherCAT: RJ-45 connector

Internal bus: Via the Installation Base (model: R30BS) Internal power: Via the Installation Base (model: R30BS) Isolation: EtherCAT to internal bus or internal power Internal bus communication cycle: Approx. 1 msec. Status indicators: PWR, RUN, ERR, L/A IN, L/A OUT (Refer to the instruction manual.)

### **EtherCAT COMMUNICATION**

Standard: IEEE 802.3u Transmission type: 100BASE-TX Transmission speed: Full-duplex 100 Mbps Transmission media: 100BASE-TX (STP cable; Category 5e) Maximum segment length: 100 meters Fixed address: Set with rotary switches (The master must support MDP.)

### INSTALLATION

Current consumption: 110 mA Operating temperature: -10 to +55°C (14 to 131°F) Storage temperature: -20 to +65°C (-4 to +149°F) Operating humidity: 10 to 90 %RH (non-condensing) Atmosphere: No corrosive gas or heavy dust Mounting: Installation Base (model: R30BS) Weight: 110 g (0.24 lb)

### PERFORMANCE

Insulation resistance:  $\geq$  100 M $\Omega$  with 500 V DC Dielectric strength: 1500 V AC @ 1 minute (EtherCAT to internal bus or internal power) 1500 V AC @ 1 minute (power input to FE; isolated on the power supply module)

### **STANDARDS & APPROVALS**

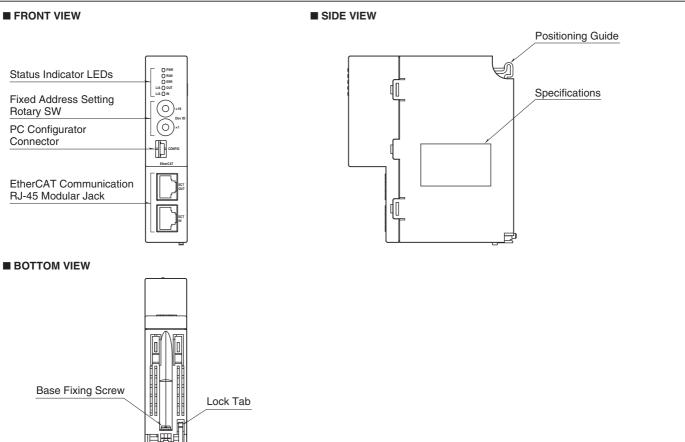
EU conformity: EMC Directive EMI EN 61000-6-4

R30NECT1 SPECIFICATIONS

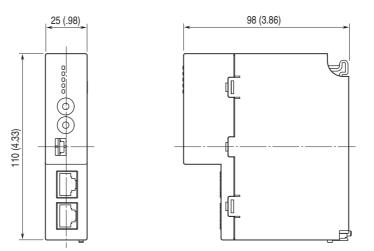
ES-9009 Rev.5 Page 1/3

EMS EN 61000-6-2 RoHS Directive EN 50581

### **EXTERNAL VIEW**

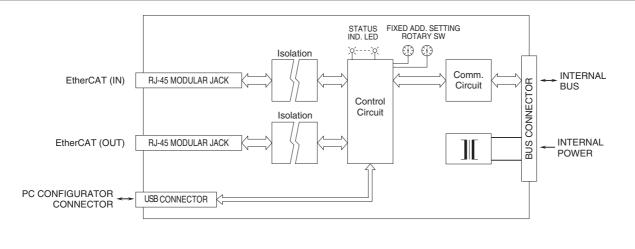


# **EXTERNAL DIMENSIONS unit: mm (inch)**





### **SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**



Specifications are subject to change without notice.

