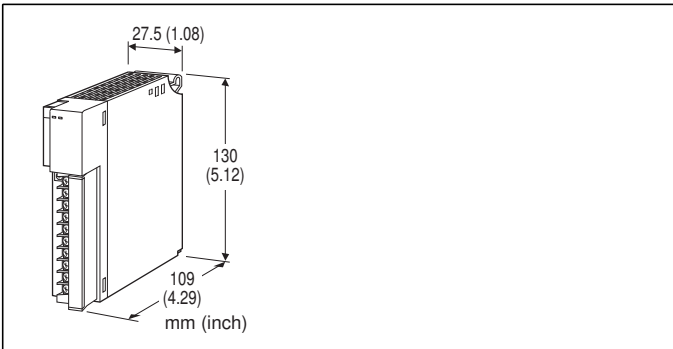


## Remote I/O R3 Series

### AC CURRENT INPUT MODULE

(4 points, isolated, clamp-on current sensor type CLSB use)



## MODEL: R3-CT4B[1][2]

### ORDERING INFORMATION

- Code number: R3-CT4B[1][2]
- Specify a code from below for each of [1] and [2].  
(e.g. R3-CT4BW/H/Q)
- Specify the specification for option code /Q  
(e.g. /C01/SET)

### NO. OF CHANNELS

**4B:** 4 channels, Sensor type CLSB

### [1] COMMUNICATION MODE

**S:** Single

**W:** Dual

### [2] OPTIONS (multiple selections)

#### Frequency

**blank:** 45 - 65 Hz

**/H:** 200 Hz - 1.2 kHz

#### Other Options

**blank:** none

**/Q:** Option other than the above (specify the specification)

### SPECIFICATIONS OF OPTION: Q (multiple selections)

#### COATING (For the detail, refer to M-System's web site.)

**/C01:** Silicone coating

**/C02:** Polyurethane coating

**/C03:** Rubber coating

#### EX-FACTORY SETTING

**/SET:** Preset according to the Ordering Information Sheet

(No. ESU-8445)

### RELATED PRODUCTS

- PC configurator software (model: R3CON)
  - Zero/span adjustments for the conversion data are available using the R3CON. Downloadable at M-System's web site.
  - Clamp-on current sensor (model: CLSB-05)
  - Clamp-on current sensor (model: CLSB-10)
  - Clamp-on current sensor (model: CLSB-20)
  - Clamp-on current sensor (model: CLSB-40)
  - Clamp-on current sensor (model: CLSB-60)
- The clamp-on current sensor, not included in the product package, must be ordered separately.  
Refer to the data sheet for the sensor for more information such as applicable wire diameter.

### GENERAL SPECIFICATIONS

#### Connection

**Internal bus:** Via the Installation Base (model: R3-BSx)

**Input:** M3 separable screw terminal (torque 0.5 N·m)

**Internal power:** Via the Installation Base (model: R3-BSx)

**Screw terminal:** Nickel-plated steel

**Isolation:** Input 1 to input 2 to input 3 to input 4 to internal bus or internal power

**Input range:** Selectable with the side DIP SW

**Conversion rate:** Selectable with the side DIP SW

**RUN indicator:** Bi-color (red/green) LED;

Red when the bus A operates normally;

Green when the bus B operates normally;

Amber when both buses operate normally.

**ERR indicator:** Bi-color (red/green) LED;

Red with input abnormality;

Green in normal operating conditions.

**Low-end cutout:** Converted as 0 % for the input below 1 % of range

Note: Change the value of "Zero Base" and "Full Base" with PC configurator software (model: R3CON) to disable low-end cutout.

### INPUT SPECIFICATIONS

#### Input (sensor & range)

CLSB-05: 0 - 50 A AC

CLSB-10: 0 - 100 A AC

CLSB-20: 0 - 200 A AC

CLSB-40: 0 - 400 A AC

CLSB-60: 0 - 600 A AC

(Operational range for the CLSB-60 is limited up to approx. 109 % (65535).

**Frequency:** 45 - 65 Hz

(200 Hz - 1.2 kHz with Option /H)

**Operational range:** 5 - 115 % of rating

**Max. working voltage:** 440 V AC (primary side)

## INSTALLATION

**Operating temperature:** -10 to +55°C (14 to 131°F)  
**Operating humidity:** 30 to 90 %RH (non-condensing)  
**Atmosphere:** No corrosive gas or heavy dust  
**Mounting:** Installation Base (model: R3-BSx)  
**Weight:** 200 g (0.44 lb)

## PERFORMANCE

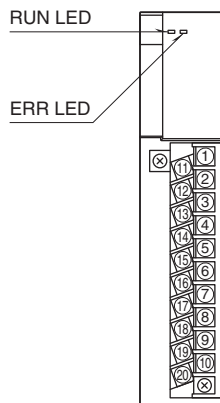
**Conversion accuracy:** Refer to the table at the end of this section.  
**Conversion rate:** 80 / 40 / 20 / 10 msec. selectable  
**Data range:** Engineering unit value × 100 (integer)  
**Data allocation:** 4  
**Current consumption:** 60 mA  
**Temp. coefficient:** ±0.015 %/°C (±0.008 %/°F)  
**Input response time:** ≤ 0.5 sec. (0 - 90 %)  
**Insulation resistance:** ≥ 100 MΩ with 500 V DC  
**Dielectric strength:** 1500 V AC @ 1 minute (input 1 to input 2 to input 3 to input 4 to internal bus or internal power)  
 2000 V AC @ 1 minute (power input to FG; isolated on the power supply module)  
**Conversion accuracy**

Rate	80 msec.	40 msec.	20 msec.	10 msec.
Accuracy	±0.5%	±0.5%	±1.0%	±2.0%

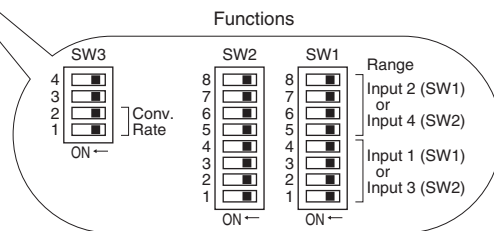
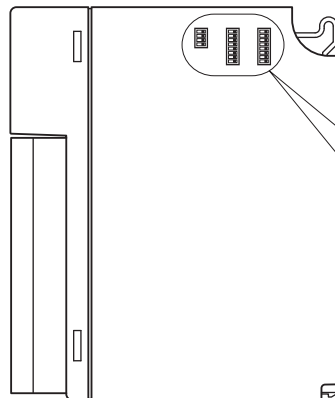
Except the accuracy of the sensor.

## EXTERNAL VIEW

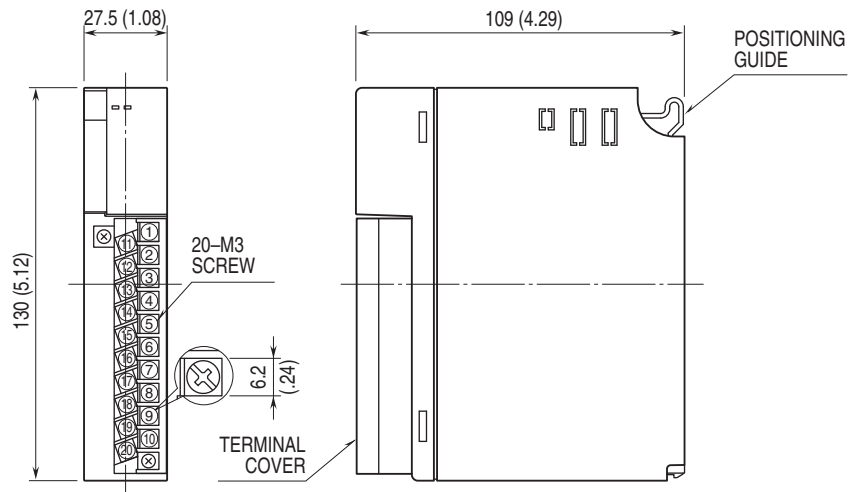
■ FRONT VIEW



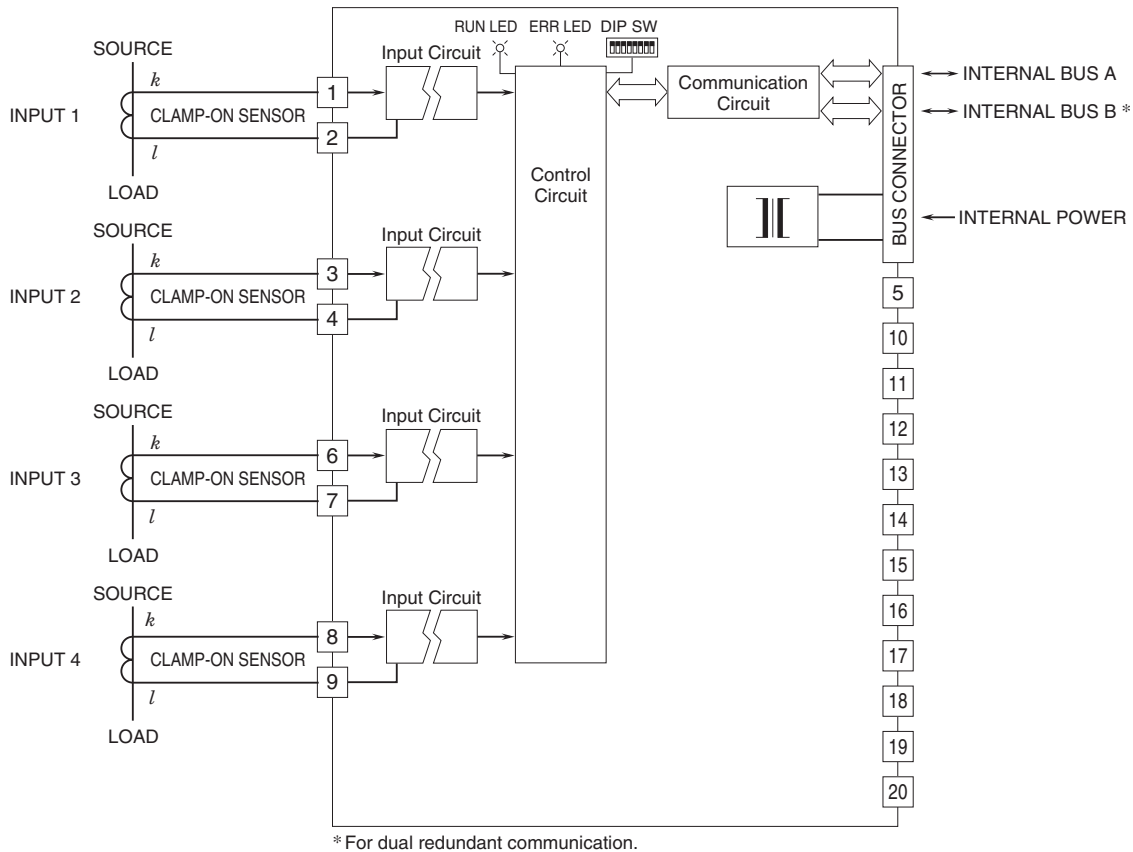
■ SIDE VIEW



## EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



## SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.