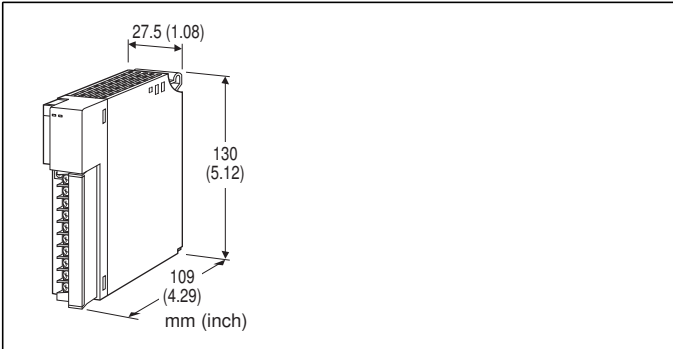


## Remote I/O R3 Series

### AC CURRENT INPUT MODULE

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



### MODEL: R3-CT4A[1][2]

#### ORDERING INFORMATION

- Code number: R3-CT4A[1][2]
- Specify a code from below for each [1] and [2].  
(e.g. R3-CT4AW/H/Q)
- Specify the specification for option code /Q  
(e.g. /C01/SET)

#### NO. OF CHANNELS

4A: 4 channels, Sensor type CLSA

#### [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-8443)

#### 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: CLSA-08)
  - Clamp-on current sensor (model: CLSA-12)
  - Clamp-on current sensor (model: CLSA-30)
  - Clamp-on current sensor (model: CLSA-50)
  - Special cable (model: CLSA-08C)
- 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 the input abnormality;

Green in normal operating conditions.

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

#### INPUT SPECIFICATIONS

**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)

##### Sensor & range:

CLSA-08: 0 - 80A AC

CLSA-12: 0 - 120A AC

CLSA-30: 0 - 300A AC

CLSA-50: 0 - 500A AC

#### 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)

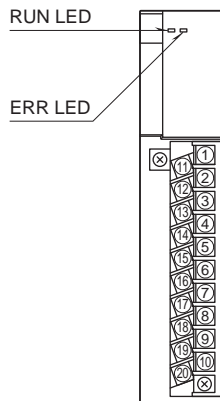
### Conversion accuracy

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

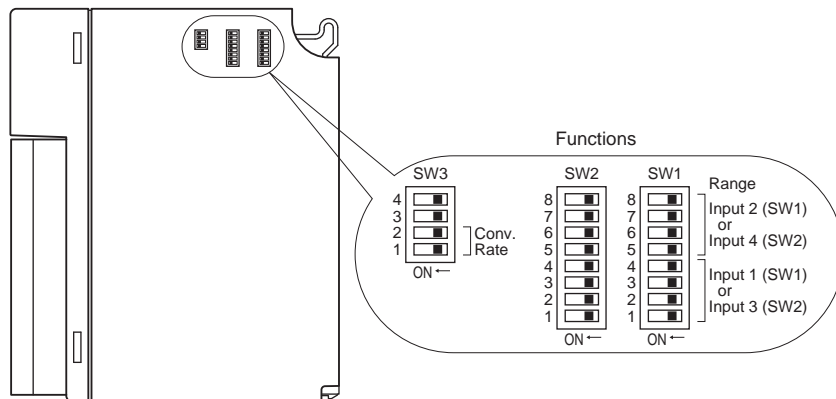
Except the accuracy of the sensor.

## EXTERNAL VIEW

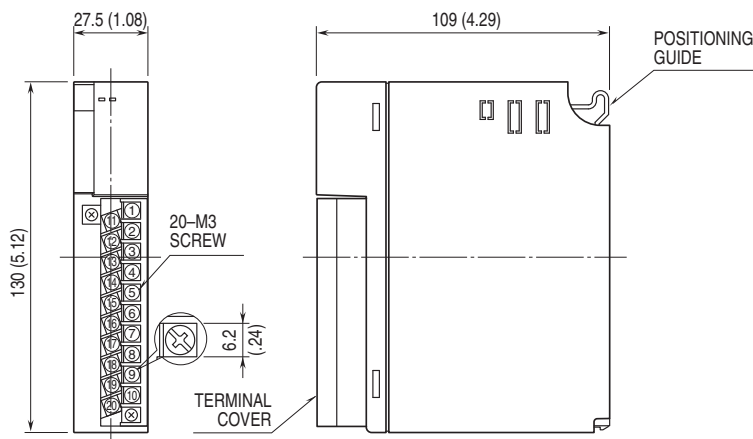
### FRONT VIEW



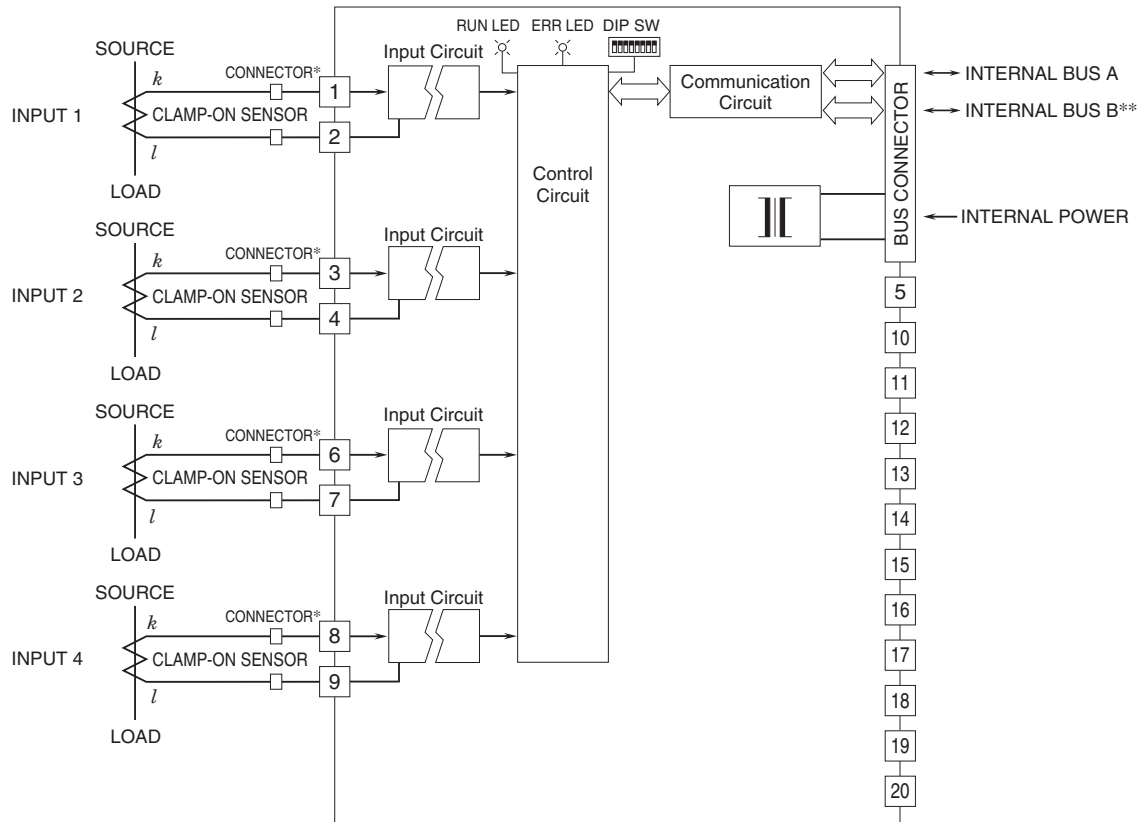
### SIDE VIEW



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



## SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



\* Connector provided only for the CLSA-08 and CLSA-12.

\*\*For dual redundant communication.



Specifications are subject to change without notice.