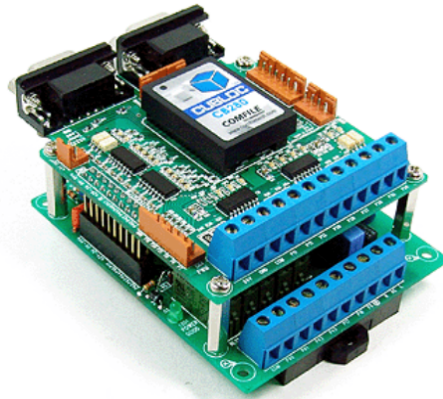


# CUSB-14R User's Manual



Thank you for your purchase from Comfile Technology

Before making use of this produce please be sure to read and observe all safety precautions.

## ◆ Safety Precautions

Please be sure to observe all safety precautions to avoid accident or injury.

※ The following precautions are separated into "Warning" and "Caution", and are defined as follows.

**Warning:** Failure to adhere to this precaution could result in personal injury or death.

**Caution:** Failure to adhere to this precaution could result in minor injury or property damage.

※ Symbols used in this document have the following meanings  
Danger and potential for serious injury.

### Warning

1. For instruments with risk to life or property (e.g. nuclear power control, medical equipment, vehicles, railways, aviation, combustion equipment, recreation equipment, safety devices, etc.), always employ adequate fail-safe mechanisms.

– Risk of fire, personal injury, and/or property damage.

2. Always mount to a panel.

– Risk of electric shock.

3. Do not attempt to repair, inspect, or wire while power is applied.

– Risk of electric shock.

4. Do not attempt to alter or repair. Refer to a qualified technician.

– Risk of electric shock.

5. Confirm all electrical connections

– Risk of fire

### Caution

1. Do not use outdoors.

– Risk of electric shock and shortening of product's life.

2. Always use the product within its specifications and ratings.

– Risk of fire and shortening of product's life.

3. Do not exceed ratings of relay switching contacts.

– Risk of device failure, melting of contacts, broken relays, fire, and other problems.

4. Do not use in environments flammable or explosive materials, moisture, direct sunlight, radiation, vibration and/or shock.

– Risk of fire and/or electric shock.

5. Keep product free of dust and debris.

– Risk of fire and/or damage to property

6. Make connections correctly and confirm polarity by measuring the appropriate terminals

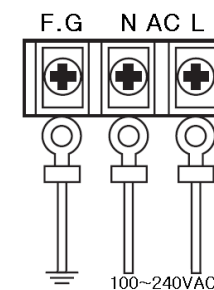
– Risk of fire and/or explosion

## ◆ Specifications

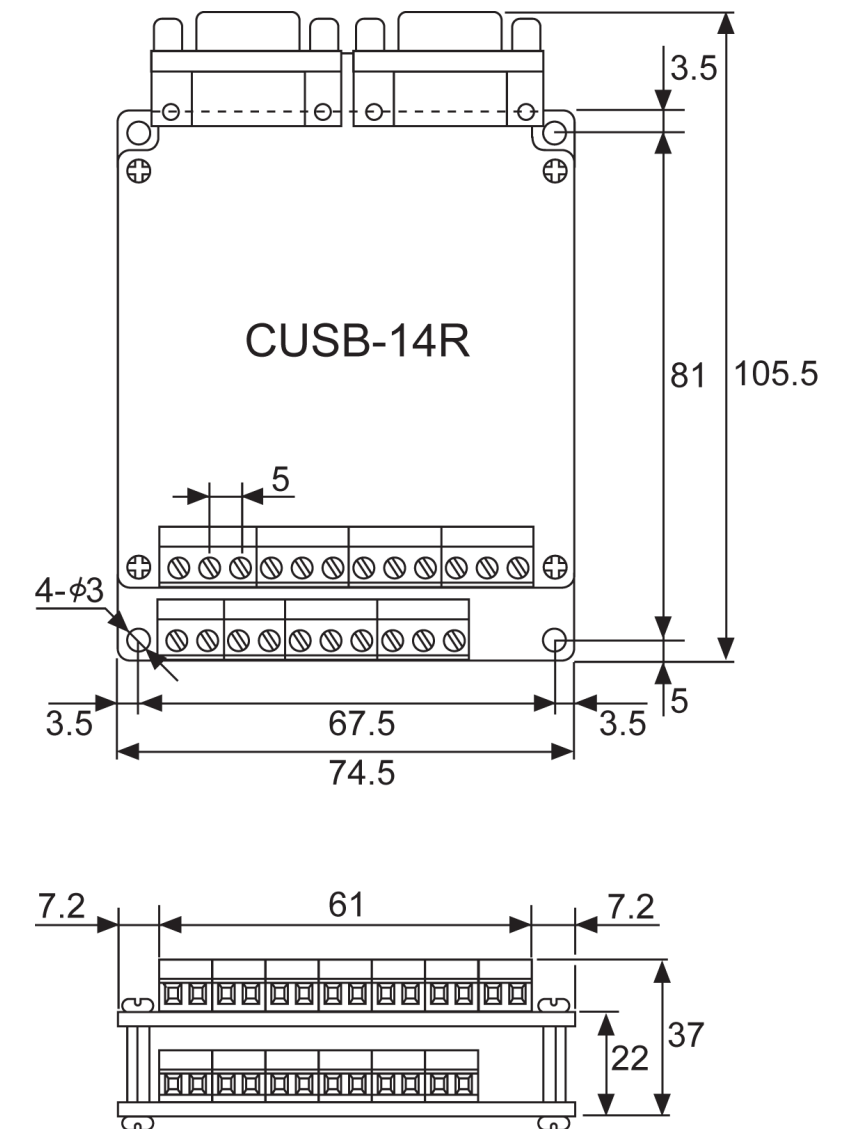
MODEL	CUSB-14R
Input Power Voltage	100~240VAC (Universal Input 85V~264VAC)
Input Power Current	100VAC/33mA, 200VAC/26mA
Internal Output Power	5V/300mA, 24V/200mA
Application CPU	CB280
Program Memory	80KB
Data Memory	BASIC: 2KB / LADDER: 1KB
EEPROM Memory	4KB
Digital Input Port	Opto-Isolated Input and Output (+/- Nonpolar)
D/I Voltage-Current	9V~26VDC / Min10mA
D/I Port Numbers	9 Point
Analog Input Port	6 Point CN15 (Input Voltage 5V)
High Count Port	None
Key Board Port	4 Point (Application of Keypad)
Digital Output Port	6 Point
D/O Voltage-Current	0~250VAC/5A, 0~30VDC / 5A
D/O Port Numbers	6 Point
PWM Output	6CH
Insulation-Resistance	Input-Output : DC500V, 1Min 100MΩ Cutoff Current 10mA
	Input-FG : DC500V, 100MΩ, 1Min Cutoff Current 10mA
Withstanding-Voltage	Input-Output : AC 2000V 1Min Cutoff Current 10mA DC500V 100MΩ
	Input-FG : AC 1500V 1Min Cutoff Current 10mA, DC500V 100MΩ
	Output-FG : AC 500V 1Min Cutoff Current 10mA, DC500V 100MΩ
Vibration	10~50Hz at 2G 3 minutes period, 30 minutes along X,Y and Z axis
Impact	10G for 20mS, Once on each X,Y and Z axis
Operating Temperature	-10℃~50℃
Humidity	10%~95% RH (Without freezing)
Communication	RS232
Size & Weight	74.5 x 105.5 x 37mm, 196g

## ◆ Power Connections

- Use at least 0.75mm diameter wires for power and at least 1.25mm diameter for ground.
- If possible, use crimped flat-type terminal connectors.
- Do not connect power while power is on.
- Path to ground should be less than 100Ω and all equipment should be individually grounded.

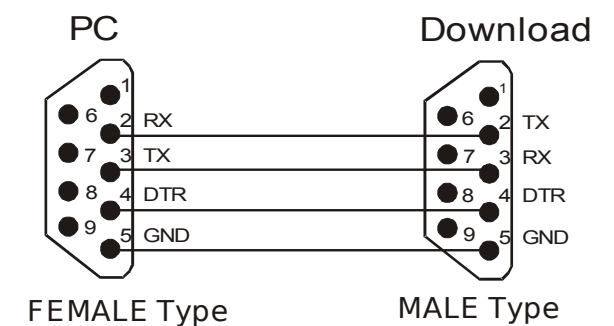


## ◆ Dimensions (mm)



## ◆ Download Cable Connection

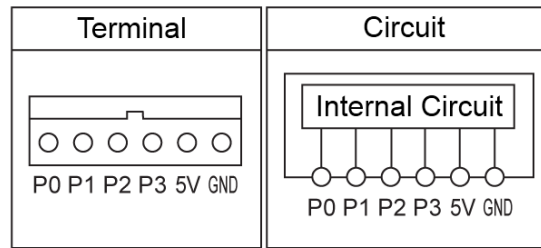
Interface	RS-232
Baud Rate	2400 ~ 230400 (115200 when downloading)
Duplex	Full Duplex
Transmission Distance	15m
Transmission Code	Binary
Transmission Format	Top Bits: 1, Parity: None, Data Bits: 8
Transmission Sequence	According to RS232C
Connection	D-Sub 9-pin



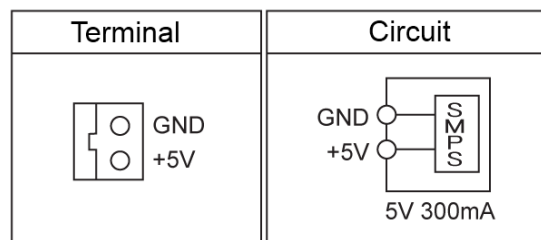
[Download Wiring Diagram]

# ◆ I/O

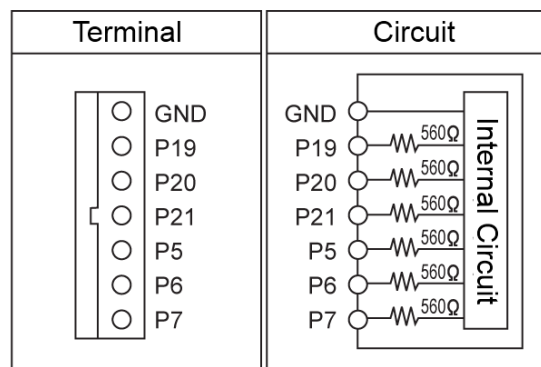
► [CN16] KEYPAD



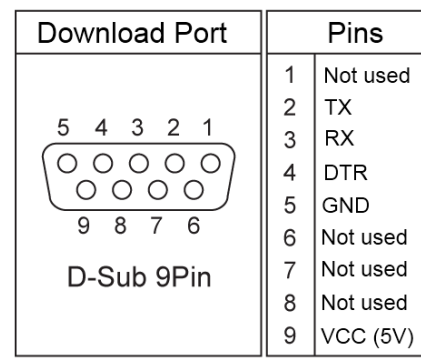
► [CN9] 5V OUT



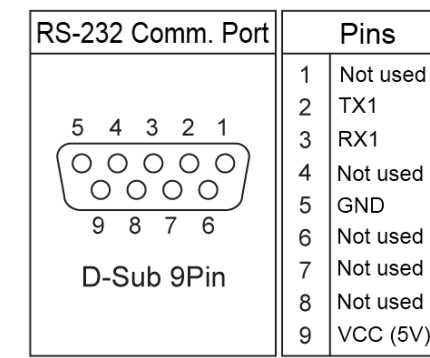
► [CN4] PWM OUT



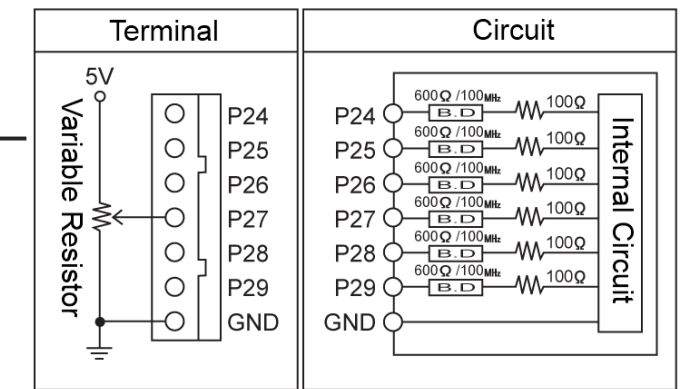
► [CN2]



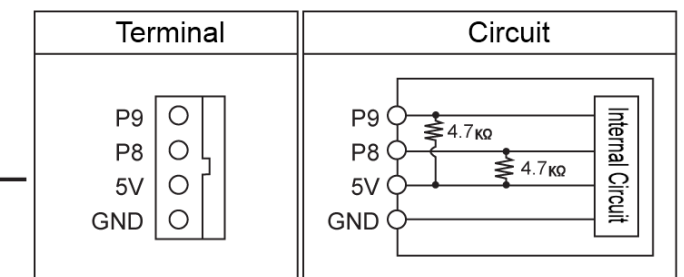
► [CN1]



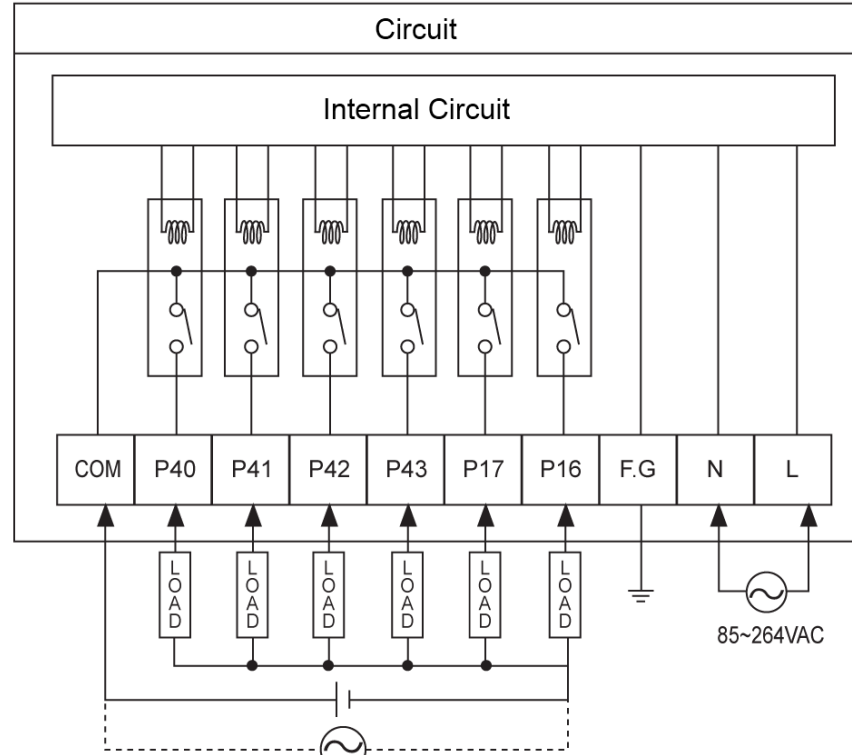
► [CN15] AD INPUT



► [CN12] CuNET



► OUTPUT



► INPUT

