CE

DESCRIPTION

- RMN-001 is a channel generator that generates 2 kHz pulse signals to pass through 2 signal Wire to create an I/O Channel
- Can check the accuracy of data and send checksum
- Frame rate up to 8 frames per phase.
- Power LED (Green), Run (Orange), and Alarm (Red) for display working status
- Alarm output is active when there is a communication error

TECHNICAL SPECIFICATION

Power Supply	220 VAC ± 10 % 50/60 Hz
Setting	1 Rotary Switch
Alarm Relay	5A/250VAC or 5A/ 30VDC
Operating Temperature	0 to 60 ˚C
Operating Humidity	20 to 85 %RH None Condensing
Insulation Resistance	>100M Ω
Insulation Category	CAT II
Terminal Size	For Cable Ø 0.2 to 2.5 mm (AWG22 to14)
Material	PC-ABS (UL 94V-0)
Installation	DIN RAIL Mounting
Size	89.5 x 74.6 x 61.5 mm.
Weight	215 g

DIMENSION

74.6 mm   64.5 mm
48.2 mm
89.5 mm   61.5 mm   31.2 mm   51 mm

13 14 15 16 17 18 19 20 21 22 23 24
RMN-001
Frame [Hi]
Power
Run
Alarm
CHANNEL GENERATOR
1 2 3 4 5 6 7 8 9 10 11 12

INSTALLATION

DIN RAIL

18±0.5 .71"±.02   25±0.5 .98"±.02   6.3±0.5 .25"±.02

35
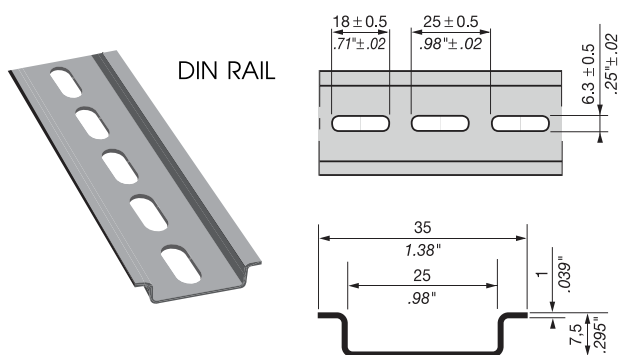1.38"
25
.98"
1 .039"
7.5 .295"

OPERATION

The RMN-001 Channel Generator is the heart of the two-wine remote control system , which generates a pulse signal that is transmitted to the 2-wire line to generate a signal that provides the I/O module. Can communicate via RS-485
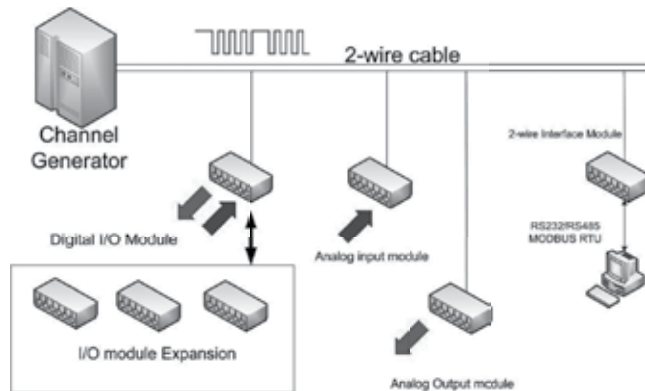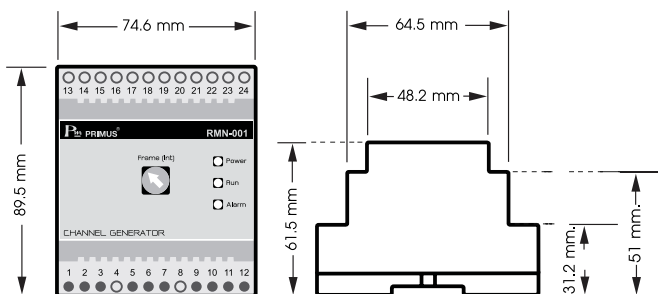
Front of the Channel Generator is a Rotary Switch used to determine the number of frames. To send data in each phase. This determines the maximum number if channels that can be communicated, and determines the sensitivity of the I/O Module by detecting data errors made during transmission of the Channel Generator. It checks the validity of the data and sends the checksum value. Enter the last frame of the data frame to the I/O Module to confirm that the data generated by the Channel Generator. Receives matches the data that the I/O Module sends or receives

If the data on both sides is not matched, Channel Generator will repeat this signal again. If there is   still another internal error. Channel Generator gives alarms through LED alarms (Red LED) and Alarm Output is active when power is supplied to RMN-001. LED Power (Green LED) is always on and when RMN-001 is started. Pulse signal If the signal can be commanded normally, LED RUN (yellow LED) will work. If you can not generate a pulse signal, the LED RUN (yellow LED) will not work

When an error occurs, the alarm relay and the LED alarm (red LED) will run

CONFIGURATION

Phase 4 bits	Frame 4 bits	Data 32 bit แบ่งเป็น 8 Box, Box ละ 4 bits	Checksum 4 bits

As show in figure 1 Frame used for Communication

| Phase 1 | | Phase 2 | | Phase 3 | ... | Phase 8 |

	Frame	Block1	Block2	Block3	Block4	Block5	Block6	Block7	Block8
Phase 1	1	bits 1-4	bits 5-8	bits 9-12	bits 13-16	bits 17-20	bits 21-24	bits 25-28	bits 29-32
	2	bits 1-4	bits 5-8	bits 9-12	bits 13-16	bits 17-20	bits 21-24	bits 25-28	bits 29-32
	3	bits 1-4	bits 5-8	bits 9-12	bits 13-16	bits 17-20	bits 21-24	bits 25-28	bits 29-32
	4	bits 1-4	bits 5-8	bits 9-12	bits 13-16	bits 17-20	bits 21-24	bits 25-28	bits 29-32
	5	bits 1-4	bits 5-8	bits 9-12	bits 13-16	bits 17-20	bits 21-24	bits 25-28	bits 29-32
	6	bits 1-4	bits 5-8	bits 9-12	bits 13-16	bits 17-20	bits 21-24	bits 25-28	bits 29-32
	7	bits 1-4	bits 5-8	bits 9-12	bits 13-16	bits 17-20	bits 21-24	bits 25-28	bits 29-32
	8	bits 1-4	bits 5-8	bits 9-12	bits 13-16	bits 17-20	bits 21-24	bits 25-28	bits 29-32

As show in figure 2 the transmission characteristics of 2-wire protocol

WIRING DIAGRAM

ORDERING CODE

RMN-001

13 14 15 16 17 18 19 20 21 22 23 24

PRIMUS® RMN-001

Frame (int)

Power
Run
Alarm

CHANNEL GENERATOR

Aux Supply   Alarm   Signal

1 2 3 4 5 6 7 8 9 10 11 12

Aux. Supply 220V ~ 50 Hz

Earth

Fuse

Line Netural Netural Line

Jump 9 -10 For Distance <1 Km

Signal

Gnd
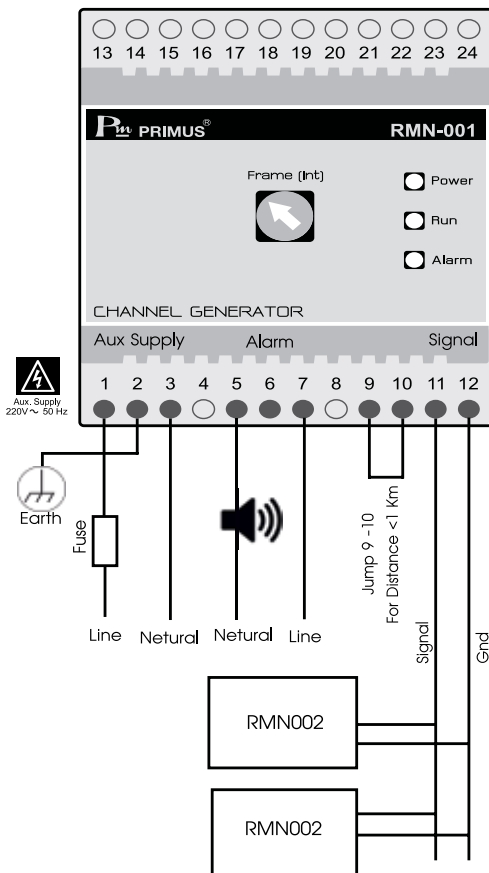
RMN002

RMN002

WARNING
- Terminals: MAX.250V ⎓ CAT III
- Make sure the correct wiring connection before turning on electricity. Mis-wiring may cause malfunction of the unit and fire.
- Never modify the unit to prevent damage or incident such as malfunction and fire etc.