

NND-200 NMEA DISTRIBUTOR (V2.0)

0. Outline

NND-200 is a NMEA distributor/buffer to provide 8 NMEA outputs from 4 inputs.

The baud rate can be up to 38400bps from 4800bps while the default rate is set as 4800bps.

With built-in optical-coupled isolator, the distributor is a reliable and professional device, which can be used on board. The external equipment connected to the distributor can be safely protected from lightning surge on line.

NND-200 contains two NMEA buffers:

Buffer 1: 2 inputs/4 outputs. When used for GNSS buffer, all 4 NMEA outputs will keep on unless both GNSS inputs fail simultaneously. When both Input 1 and Input 2 are valid, only Input 1 will be selected as default.

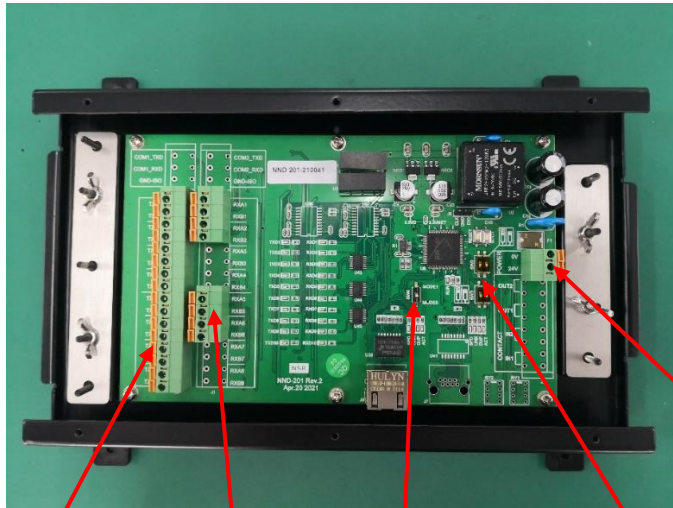
Buffer 2: 2 inputs/4 outputs. Same as Buffer 1.

Buffer 1 and Buffer 2 can be combined into a new buffer with 4 inputs/8 outputs.

1. Specifications:

Model No.	NND-200
Type of interface	RS485/RS422
Standards	Conform to IEC61162-1, IEC61162-2, NMEA 0183 Standards
Number of inputs	4
Number of outputs	8
Operation Mode	Semi-duplex
Power supply	DC24V, 300mA
LED indicators	NMEA inputs, NMEA outputs
Baud rate	4800bps~38400bps (default 4800bps)
Cable length	0-5km
Size	255*175*35mm
Working Environment	- 40°C~85°C, relative humidity 5% to 95%

2. Product description



OUTPUT*8 INPUT*4 MODE SELECTOR BAUDRATE SELECTOR PWR INPUT

2.1 INPUTS & OUTPUTS

BUFFER	INPUT	OUTPUT
Buffer 1	RXA1/RXB1 RXA2/RXB2	TXA1/TXB1
		TXA2/TXB2
		TXA3/TXB3
		TXA4/TXB4
Buffer 2	RXA5/RXB5 RXA6/RXB6	TXA5/TXB5
		TXA6/TXB6
		TXA7/TXB7
		TXA8/TXB8

2.2 MODE SELECTOR

SWITCH 4	INPUT	OUTPUT	REMARKS
MODE 0	RXA1/RXB1 RXA2/RXB2 RXA5/RXB5 RXA6/RXB6	TXA1/TXB1	Buffer 1+Buffer 2
		TXA2/TXB2	
		TXA3/TXB3	
		TXA4/TXB4	
		TXA5/TXB5	
		TXA6/TXB6	
		TXA7/TXB7	
		TXA8/TXB8	
MODE 1	RXA1/RXB1 RXA2/RXB2	TXA1/TXB1	Buffer 1
		TXA2/TXB2	
		TXA3/TXB3	
		TXA4/TXB4	
	RXA5/RXB5 RXA6/RXB6	TXA5/TXB5	Buffer 2
		TXA6/TXB6	
		TXA7/TXB7	
		TXA8/TXB8	

Note: Mode 0 as default.

2.3 BAUDRATE SELECTOR

	1	2	BPS	REMARKS
SWITCH 2	OFF	OFF	4800	Buffer 1
	ON	OFF	9600	
	OFF	ON	19200	
	ON	ON	38400	
SWITCH 3	OFF	OFF	4800	Buffer 2
	ON	OFF	9600	
	OFF	ON	19200	
	ON	ON	38400	

Note: 4800 bps as default.

3. Examples of use

Description	Mode	Examples
1 input to 8 outputs	Mode 0	GNSS input*1, GNSS output*8
2 inputs to 8 outputs	Mode 0	GNSS 1 and GNSS 2 input, GNSS 1 or 2 output*8 - When GNSS 1 input available, GNSS 1 output. - When GNSS 1 input unavailable, GNSS 2 output
		GNSS+Heading input, GNSS+Heading output*8
4 inputs to 8 outputs	Mode 0	GNSS 1+2+3+4 input, GNSS 1 (2,3,4) output*8 - When GNSS 1 input available, GNSS 1 output. - When GNSS 1 input unavailable, GNSS 2 output - When GNSS 1&2 input unavailable, GNSS 3 output - When GNSS 1&2&3 input unavailable, GNSS 4 output
1 input to 4 outputs 1 input to 4 outputs	Mode 1	GNSS input*1, GNSS output*4 Heading input*1, Heading output*4
2 inputs to 4 outputs 2 inputs to 4 outputs	Mode 1	GNSS 1+2 input, GNSS 1 (2) output*4 - When GNSS 1 input available, GNSS 1 output. - When GNSS 1 input unavailable, GNSS 2 output

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