

PM111 AUTOMATIC NMEA EXPANDER

AUTO OR MANUAL INPUT SELECTION

2 INPUTS & 8 OUTPUTS



Features

- Automatic or manual input selection every 10 seconds
- 1000 volts full galvanic isolation between inputs, outputs and power supply.
- 1 NMEA 0183 / RS-232 input
- 1 NMEA 0183 / RS-422 input
- 4 NMEA 0183 / RS-232 outputs
- 4 NMEA 0183 / RS-422 output.
- Wide operating voltage range of 9 to 36 volts DC.
- Fully potted electronics in flame retardant ABS plastic case (UL94V-0) with mounting flanges.
- Buffers and Converts NMEA 0183 & RS232 signals.

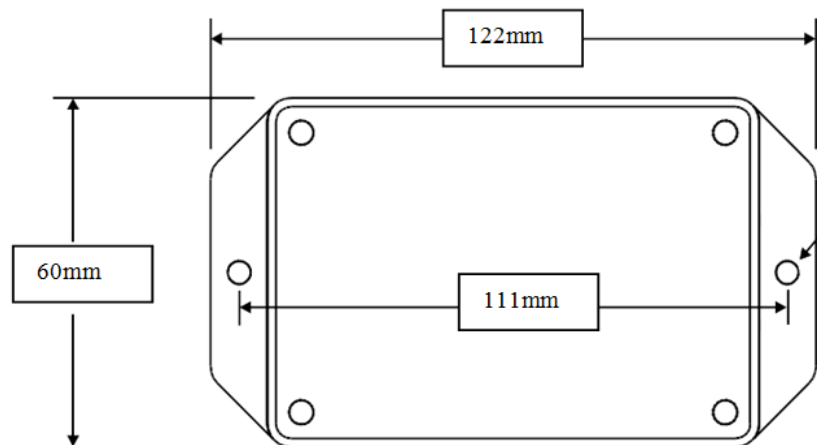
Description

The PM111 Expander allows multiple listeners to be connected to a single talker. The PM111 takes either a single-ended RS-232 or a differential RS-422 signal. It conditions and buffers the input signal to provide four single-ended RS-232 outputs and four differential RS-422 outputs. It also provides up to $1kV_{RMS}$ input-to-output-to- power isolation using optical and transformer technology.

Specifications:

Isolation	3-way isolation: Input-to-output-to-power; Hi-pot: 1000 V_{RMS} for 1 minute Leakage Current: Less than 50uA @ 1000 VAC / 60Hz;
Power Supply	9 to 36 volts DC @ 30mA (min), 140mA (max). 1000 volts DC reverse polarity protection.
NMEA / RS-422	Input Resistance: 1Kohms; Output drive: ± 60 mA
NMEA / RS-232	Input Resistance: 1Kohms; Output Drive: ± 10 mA
Baud Baud Rate	0 to 115.2 kbps
Case	Height: 1.34 in. (34 mm) Length: 4.8 in. (122 mm) Width: 2.36 in. (60 mm)

Diemensions:



PM111 RS232 & RS422 NMEA EXPANDER

WITH AUTO & MANUAL INPUT SELECTION

2 INPUTS : BOTH SUPPORT RS422 & RS232

8 OUTPUTS : (4xRS232) + (4xRS422)

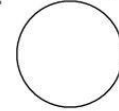
MANUAL SELECT: SHORT B-G OR B-W DISABLES AUTO MODE

BLUE INPUT HAS PRIORITY IN AUTO MODE IF BOTH PRESENT

WAIT 10 SECONDS TO OPERATE THE SELECTED MODE

www.devrematik.com +90.532.609.6996

INDICATORS		
INPUTS		OUTS
W	B	W
		B



PWR		INPUTS		MAN	RS232 OUTPUTS				RS422 OUTPUTS						
9-36VDC		BLUE	WHITE	SEL	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8			
+	-	A	B	A	B	B	W	+ G	+ G	+ G	+ G	BA	BA	BA	BA

HOW TO SELECT AUTO MODE

MAKE NO CONNECTIONS BETWEEN MAN SEL B W G (LEAVE UNCONNECTED)

MODE	INPUTS DATA	OUTPUTS
AUTO	IF BOTH INPUTS HAVE DATA	BLUE INPUT TO ALL OUTPUTS
AUTO	IF ONLY BLUE INPUT HAVE DATA	BLUE INPUT TO ALL OUTPUTS
AUTO	IF ONLY WHITE INPUT HAVE DATA	WHITE INPUT TO ALL OUTPUTS

Wait 30 seconds at least to see effect of selection

HOW TO SELECT MANUAL MODE

MODE	INPUTS DATA	CONNECT BETWEEN
BLUE	BLUE INPUT to ALL OUTPUTS	MANUAL SELECT B & MANUAL SELECT G
WHITE	WHITE INPUT to ALL OUTPUTS	MANUAL SELECT W & MANUAL SELECT G

Wait 30 seconds at least to see effect of selection

How To Check PM111

- Remove All outputs and inputs
- Apply Power Input 9VDC
- Apply both blue and white inputs (A to - and B to +) 9VDC
- Connect voltmeter to
RS232 outputs G to - & C1 to + and check voltage above 8VDC
RS232 outputs G to - & C2 to + and check voltage above 8VDC
All RS422 outputs A to - & B to + and check voltage above 3VDC
- Remove 9VDC both blue and white inputs
- Connect voltmeter to
RS232 outputs G to - & C1 to + and check voltage below -8VDC
RS232 outputs G to - & C2 to + and check voltage below -8VDC
All RS422 outputs A to - & B to + and check voltage below -3VDC
- If any of the voltmeter reading not in the acceptable range please return the item to Devrematik

EXAMPLE CONNECTION

PM111 RS232 & RS422 NMEA EXPANDER

WITH AUTO & MANUAL INPUT SELECTION

2 INPUTS : BOTH SUPPORT RS422 & RS232

8 OUTPUTS : (4xRS232) + (4xRS422)

MANUAL SELECT: SHORT B-G OR B-W DISABLES AUTO MODE

BLUE INPUT HAS PRIORITY IN AUTO MODE IF BOTH PRESENT

WAIT 30 SECONDS TO OPERATE THE SELECTED MODE

www.devrematik.com +90.532.6096996

INDICATORS	
INPUTS	OUTPUTS
W B	W B

PWR	INPUTS		MAN SEL	RS232 OUTPUTS				RS422 OUTPUTS			
	BLUE	WHITE		CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8
9-36VDC	A	B	B	+G	+G	+G	+G	BA	BA	BA	BA
+ -	A	B	B	+G	+G	+G	+G	BA	BA	BA	BA

POWER +
9-36VDC -

SENDER 1 (BLUE)
Example:GPS1

SENDER 2 (WHITE)
Example:GPS2

BLUE ○ WHITE
 AUTO
 INPUT SELECT SWITCH

RECEIVER 1
Example:RADAR1

RECEIVER 2
Example:RADAR2

RECEIVER 3
Example:ECDIS1

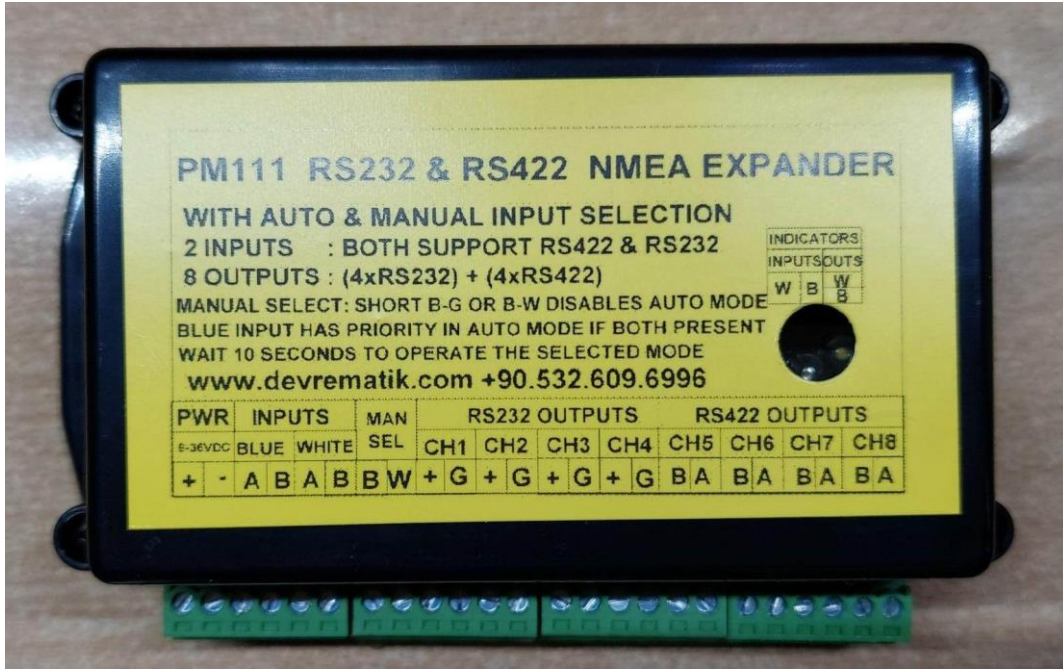
RECEIVER 4
Example:ECDIS2

RECEIVER 5
Example:SONAR1

RECEIVER 6
Example:SONAR2

RECEIVER 7
Example:REP.1

RECEIVER 8
Example:REP.2



PM111 Picture

Üretici Firma :

Firma Faaliyet Alanı:

Address:

Phone:

Email:

Firma NCAGE Kodu:

Malzemenin Türkçe Adı:

Malzemenin İngilizce Adı:

Parça No:

Muadil Ürünlerin Stok Numaraları: DA0287023 , 08S016458 , 015411594

Devrematik Mustafa PATAN

Arge ve Üretim

PK 230 IZMIT MERKEZ KOCAELI

+90532.6096996

info@devrematik.com

T545Y

PM111 RS232 & RS422 ÇOKLAYICI

PM111 RS232 & RS422 EXPANDER

PM111