



x310

1-channel A/D (0 ~ 10 V),  
1-channel A/D (0 ~ 20 mA), 2-channel D/A (0 ~ 10 V),  
3-channel D/I and 3-channel D/O

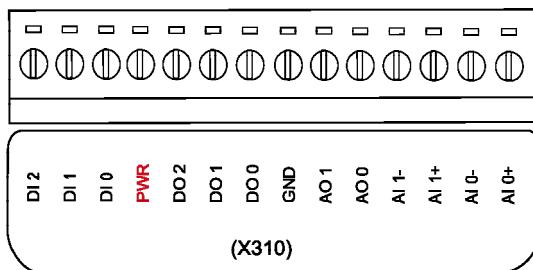
## Introduction

The X-board series are for I-7188XA, I-7188XB, I-7188XC, I-7188XG, I-7188EG, I-7188EX and uPAC-7186EX Series (uPAC-7186EX, uPAC-7186PEX, uPAC-7186EG, uPAC-7186EX-FD, uPAC-7186EX-SM).

Above one μPAC can plug only one X-board.

X310 is a 2-channel Non-Isolation Analog Input and 1-channel Non-Isolation Analog Output and 3-channel Non-Isolation Digital Input and 3-channel Non-Isolation Digital Output X-board for I-7188XB, I-7188XG, I-7188EX, I-7188EG and uPAC-7186EX Series.

## Pin Assignments



## Ordering Information

<b>X310 CR</b>	1-channel A/D (0 ~ 10 V), 1-channel A/D (0 ~ 20 mA), 2-channel D/A (0 ~ 10 V), 3-channel D/I and 3-channel D/O (RoHS)
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## ■ Features

- 2-channel Non-Isolation Analog Input and 1-channel Non-Isolation Analog Output and 3-channel Non-Isolation Digital Input and 3-channel Non-Isolation Digital Output
  - 12-bit differential input (Ch 0: 0 ~ 20 mA, Ch 1: 0 ~ 10 VDC)
  - 12-bit output (0 ~ 10 VDC)



## Specifications

<b>Analog Input</b>		
Channels	2	
Type	Voltage/Current	
Range	Ch0 : 0 ~ 20 mA Ch1 : 0 ~ +10 V	
Resolution	12-bit	
Sampling Rate	1 KHz Max.	
Input Impedance	Ch0 : 500 Ohm Ch1 : 2 MOhm	
Overshoot Protection	+30 VDC	
Isolation	None	
<b>Analog Output</b>		
Channels	2	
Type	Voltage	
Range	0 ~ +10 V	
Resolution	12-bit	
Voltage Output Capability	10 mA	
Isolation	None	
<b>Digital Input</b>		
Channels	3	
Sink/Source (NPN/PNP)	Sink	
Dry Contact	ON Voltage Level	+3.5V ~ +30VDC
	OFF Voltage Level	+1V Max.
Isolation	None	
<b>Digital Output</b>		
Channels	3	
Type	Open Collector (NPN)	
Load Voltage	≤ +30 VDC	
Max. Load Current	100 mA	
Isolation	None	
<b>Mechanical</b>		
Dimensions (mm)	38 mm x 64 mm	
<b>Environmental</b>		
Operating Temperature	-25 ~ +75 °C	
Storage Temperature	-40 ~ +80 °C	
Humidity	5 ~ 90 %, Non-condensing	