

LP-8000 vs. LP-9000

I/O Modules Comparison



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Modules Migration

The migration of using LP-8000 platforms with I-8K/I-87K series modules to LP-9000 platforms with I-9K/I-97K series modules. Some programs and wiring connections may be needed to modify. Refer to the following table for migrating from I-8K/87K modules to I-9K/I-97K modules.

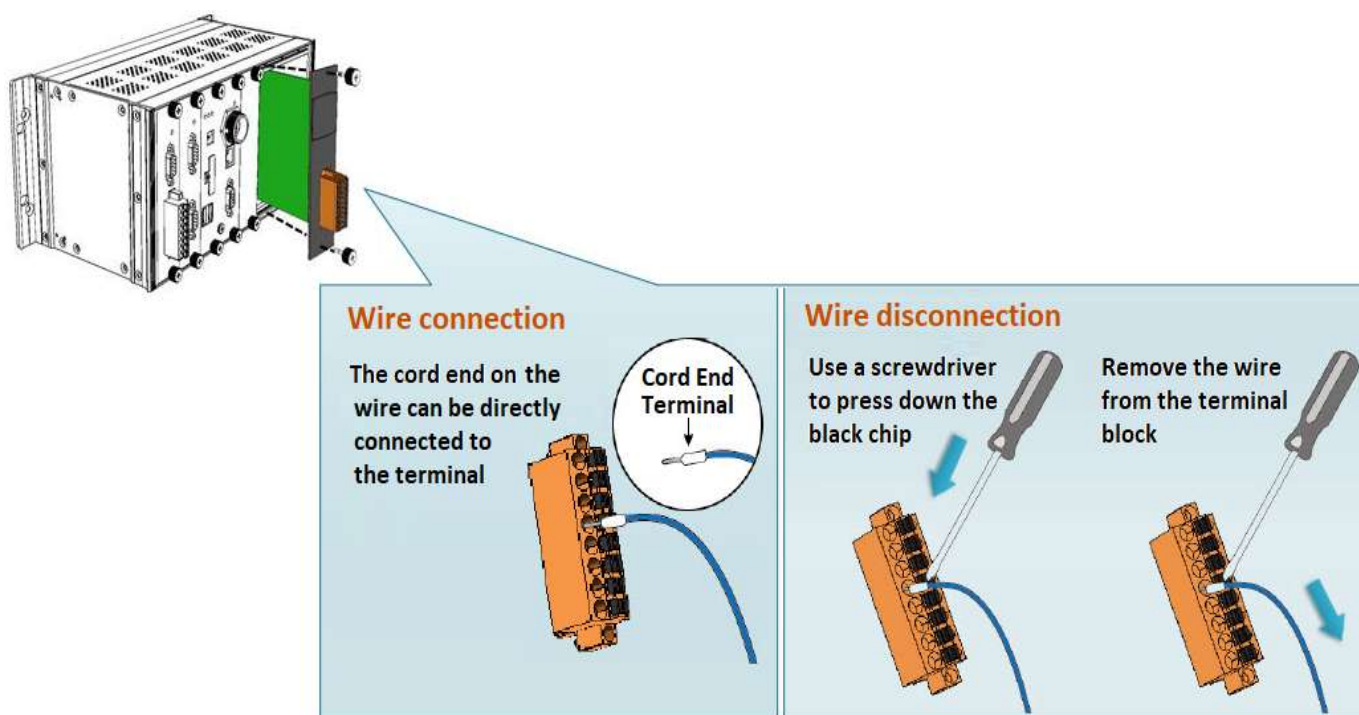
I/O modules for LP-8000 platforms	I/O modules for LP-8000 platforms
I-8040W	I-9040
I-8041W	I-9041
I-8114iW	I-9114
I-8144iW	I-9144

New Features for I-9K/I-97K modules

Spring clamp terminal connector

The spring clamp terminal block for the I/O module connector of LP-9000 offers the advantages (anti-vibration, stable clamping and installation easier) relative to screw terminals.

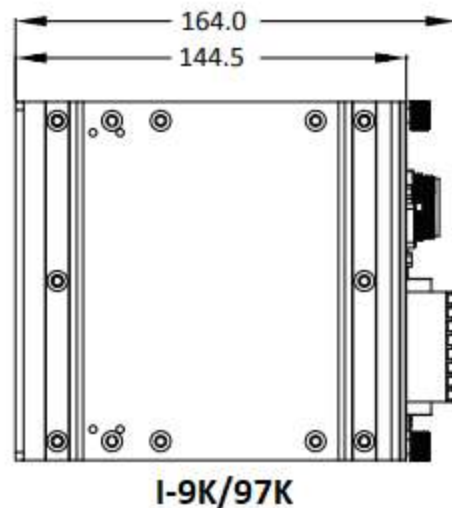
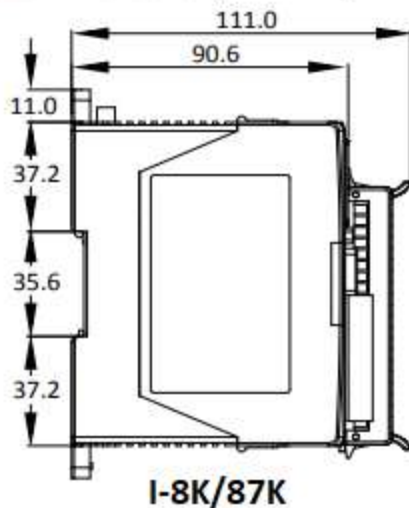
Except I-9040/I-9041 modules, the other I-9K modules support spring clamp terminal connector.



The Difference of I-8K/I-87K and I-9K/I-97K modules

The height of the I-9K/I-97K module including the terminal block plugged on a LP-9000 controller is 164mm, and the height of I-8K/87K module plugged on LP-8000 controller is 111 mm.

Dimensions (Unit: mm)



The Common features of all I-9K/I-97K modules

Environment		
Operating Temperature	-25 °C to +75 °C	
Storage Temperature	-30 °C to +85 °C	
Humidity	5 % to 95 % RH, Non-condensing	
Dimensions		
Dimension (L x W x H)	115 mm x 30 mm x 85 mm	144 mm x 31 mm x 134 mm

I-8040W & I-9040

Hardware Different

Digital Input		I-8040W	I-9040
Channels		32 (Sink/Source)	
Input Type		One Common for All Digital Inputs	
On Voltage Level		+10 V to +30 V	+19 V to +30 V
Off Voltage Level		+4 V max	+11 V max
Input Impedance		3k Ohms, 0.5 W	
Intra-module Isolation, Field to logic		3750 Vrms	
4 kV ESD Protection		Contact for each channel	Contact for each channel
Low Pass Filter			
Response time	OFF to ON	-	1ms/5ms/10ms/20ms/40ms/70ms (by Jumper select) or CPU parameter setting (Default Setting is 10ms)
	ON to OFF	-	1ms/5ms/10ms/20ms/40ms/70ms (by Jumper select) or CPU parameter setting (Default Setting is 10ms)
LED Display			
Power Indicator		1 as Power Indicator	
I/O LED Indicators		32 as Digital Input Indicators	
Power			
Power Consumption		0.13 A@5 V =0.65 W, +/-5 % For Hardware version 1.6	0.2 A@5 V =1 W, +/-5 % For Hardware version 1.0

I-8041W & I-9041

Hardware Different

Digital Input		I-8041W	I-8041PW	I-9041
Channels		32 (Sink/Source)		
Input Type		Isolated Open Collector		
Max. Load Current		100 mA/Channel	-	100 mA/Channel
Load Voltage		+5 VDC to +30 VDC	-	+5 VDC to +30 VDC
Input Impedance		3k Ohms, 0.5 W		
Intra-module Isolation, Field to logic		3750 Vrms		
4 kV ESD Protection		Contact for each channel	-	Contact for each channel
Low Pass Filter				
Response time	OFF to ON	-		
	ON to OFF	-		
LED Display				
Power Indicator		1 as Power Indicator		
I/O LED Indicators		32 as Digital Input Indicators		
Power				
Power Consumption		0.13 A@5 V =0.65 W, +/-5 % For Hardware version 1.6	-	0.2 A@5 V =1 W, +/-5 % For Hardware version 1.0