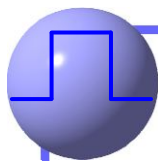




# Bridging the Gap between Real World and Computer

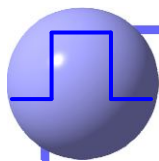


| Model Name           | DIO9201                                                    | P.50                         | DIO3206                  | P.52 | DIO4264                | P.65 | DIO6208/16                                                 | P.67                         |
|----------------------|------------------------------------------------------------|------------------------------|--------------------------|------|------------------------|------|------------------------------------------------------------|------------------------------|
| Bus                  | ISA                                                        |                              | PCI                      |      | PC-104                 |      | PCI-104                                                    |                              |
| Input                | 16                                                         |                              | 48 TTL                   |      | 64 TTL                 |      | 8 / 16                                                     |                              |
| Output               | 16                                                         |                              |                          |      |                        |      | 8 / 16                                                     |                              |
| Isolation            | Y                                                          |                              | No                       |      | No                     |      | Y                                                          |                              |
| Polarity             | No                                                         |                              | No                       |      | No                     |      | Software Programmable                                      |                              |
| Debounce             | Hardware                                                   |                              | Software Programmable    |      | No                     |      | Software programmable                                      |                              |
| Interrupt            | No                                                         |                              | Y                        |      | Y                      |      | Y                                                          |                              |
| Special Function     | Watchdog                                                   |                              | 32-bit timer             |      | No                     |      | 32-bit timer                                               |                              |
| Dimensions (W) * (H) | 175*110 mm<br>6.9*4.4 in                                   |                              | 130*102 mm<br>5.2*4.1 in |      | 90*96 mm<br>3.6*3.8 in |      | 90*96mm<br>3.6*3.8 in                                      |                              |
| Wiring Board         | ADP9201DIN(R)<br>ADP9201DIN(S)<br>ADP9201DIN(P)<br>JS51053 | P.79<br>P.79<br>P.79<br>I.12 | JS51060                  | I.12 | No                     |      | ADP9201DIN(R)<br>ADP9201DIN(S)<br>ADP9201DIN(P)<br>JS51053 | P.79<br>P.79<br>P.79<br>I.12 |

| Model Name           | DIO3208B                                   | P.59 | DIO3216B                                                   | P.61                         | DIO3217                                                                                                       | P.63                                                 |
|----------------------|--------------------------------------------|------|------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| Bus                  | PCI                                        |      | PCI                                                        |                              | PCI                                                                                                           |                                                      |
| Input                | 8                                          |      | 16                                                         |                              | 16                                                                                                            |                                                      |
| Output               | 8 Relay                                    |      | 16                                                         |                              | 16                                                                                                            |                                                      |
| Isolation            | Y                                          |      | Y                                                          |                              | Y                                                                                                             |                                                      |
| Polarity             | No                                         |      | Software Programmable                                      |                              | Software Programmable                                                                                         |                                                      |
| Debounce             | Software Programmable                      |      | Software Programmable                                      |                              | Software Programmable                                                                                         |                                                      |
| Interrupt            | Y                                          |      | Y                                                          |                              | Y                                                                                                             |                                                      |
| Special Function     | 32-bit multifunction timer / counter / PWM |      | No                                                         |                              | 32-bit timer/counter, Quadrature encoder counter                                                              |                                                      |
| Dimensions (W) * (H) | 130*102 mm<br>5.2*4.1 in                   |      | 130*102 mm<br>5.2*4.1 in                                   |                              | 130*102 mm<br>5.2*4.1 in                                                                                      |                                                      |
| Wiring Board         | JS51060                                    | I.12 | ADP9201DIN(R)<br>ADP9201DIN(S)<br>ADP9201DIN(P)<br>JS51053 | P.79<br>P.79<br>P.79<br>I.12 | ADP9201DIN(R)<br>ADP9201DIN(S)<br>ADP9201DIN(P)<br>ADP3217DIN(R)<br>ADP3217DIN(S)<br>ADP3217DIN(P)<br>JS51053 | P.79<br>P.79<br>P.79<br>P.91<br>P.91<br>P.91<br>I.12 |



# Bridging the Gap between Real World and Computer

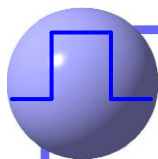


| Model Name           | DIO3232A/B <span>P.53</span>                                                                                                                                                                                                                   | DIO3248A/B <span>P.55</span>                                                                                                       | DIO3264A/B <span>P.57</span>                                                               |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Bus                  | PCI                                                                                                                                                                                                                                            | PCI                                                                                                                                | PCI                                                                                        |
| Input                | 32                                                                                                                                                                                                                                             | 48                                                                                                                                 | 64                                                                                         |
| Output               | 32                                                                                                                                                                                                                                             | 16                                                                                                                                 | No                                                                                         |
| Isolation            | Y                                                                                                                                                                                                                                              | Y                                                                                                                                  | Y                                                                                          |
| Polarity             | Software programmable                                                                                                                                                                                                                          | Software programmable                                                                                                              | Software programmable                                                                      |
| Debounce             | Fixed / Software programmable                                                                                                                                                                                                                  | Fixed / Software programmable                                                                                                      | Fixed / Software programmable                                                              |
| Interrupt            | Y                                                                                                                                                                                                                                              | Y                                                                                                                                  | Y                                                                                          |
| Special Function     | No / 32-bit timer, 2 port TTL, Input counter                                                                                                                                                                                                   | No / 32-bit timer, 2 port TTL, Input counter                                                                                       | No / 32-bit timer, 2 port TTL, Input counter                                               |
| Dimensions (W) * (H) | 159*106 mm<br>6.3*4.2 in                                                                                                                                                                                                                       | 159*106 mm<br>6.3*4.2 in                                                                                                           | 159*106 mm<br>6.3*4.2 in                                                                   |
| Wiring Board         | ADP3232DIN(N) <span>P.81</span><br>ADP3232DIN(P) <span>P.81</span><br>ADP3232DIN(R) <span>P.81</span><br>ADP3232ADIN(N) <span>P.83</span><br>ADP3232ADIN(P) <span>P.83</span><br>ADP3232ADIN(R) <span>P.83</span><br>JS51050 <span>I.12</span> | ADP3248DIN(N) <span>P.85</span><br>ADP3248DIN(P) <span>P.85</span><br>ADP3248DIN(R) <span>P.85</span><br>JS51050 <span>I.12</span> | ADP3264DIN <span>P.87</span><br>ADP3264ADIN <span>P.88</span><br>JS51050 <span>I.12</span> |

| Model Name           | DIO3265 <span>P.51</span>                                 | DIO8217 <span>P.71</span>                                                                                                                          |
|----------------------|-----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Bus                  | PCI                                                       | PCIe                                                                                                                                               |
| Input                | No                                                        | 16                                                                                                                                                 |
| Output               | 64                                                        | 16                                                                                                                                                 |
| Isolation            | Y                                                         | Y                                                                                                                                                  |
| Polarity             | Software programmable                                     | Software programmable                                                                                                                              |
| Debounce             | Software programmable (TTL port)                          | Software programmable                                                                                                                              |
| Interrupt            | Y                                                         | Y                                                                                                                                                  |
| Special Function     | 32-bit timer, 2 port TTL                                  | Wide range input, Wide range output, 32-bit timer, 2 port TTL input counter, Multi-function Timer/Counter/PWM generator/Quadrature encoder counter |
| Dimensions (W) * (H) | 160*95 mm<br>6.3*3.8 in                                   | 144*96 mm<br>5.7*3.8 in                                                                                                                            |
| Wiring Board         | ADP3265DIN <span>P.89</span><br>JS51050 <span>I.12</span> | JS510681 <span>I.12</span><br>JS51050 <span>I.12</span>                                                                                            |



# Bridging the Gap between Real World and Computer



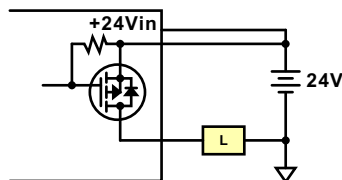
| Model Name           | DIO8216                                                                      | P.69 | DIO8232                                                                      | P.73 | DIO8264                                        | P.75 | DIO8265                                        | P.77 |
|----------------------|------------------------------------------------------------------------------|------|------------------------------------------------------------------------------|------|------------------------------------------------|------|------------------------------------------------|------|
| Bus                  | PCIe                                                                         |      | PCIe                                                                         |      | PCIe                                           |      | PCIe                                           |      |
| Input                | 16                                                                           |      | 32                                                                           |      | 64                                             |      | No                                             |      |
| Output               | 16                                                                           |      | 32                                                                           |      | No                                             |      | 64                                             |      |
| Isolation            | Y                                                                            |      | Y                                                                            |      | Y                                              |      | Y                                              |      |
| Polarity             | Software Programmable                                                        |      | Software Programmable                                                        |      | Software Programmable                          |      | Software Programmable                          |      |
| Debounce             | Software Programmable                                                        |      | Software programmable                                                        |      | Software programmable                          |      | Software Programmable (TTL port)               |      |
| Interrupt            | Y                                                                            |      | Y                                                                            |      | Y                                              |      | Y                                              |      |
| Special Function     | 32-bit timer, WDT<br>2 port TTL, Input counter                               |      | 32-bit timer, WDT<br>2 port TTL, Input counter                               |      | 32-bit timer, WDT<br>2 port TTL, Input counter |      | 32-bit timer, WDT<br>2 port TTL, Input counter |      |
| Dimensions (W) * (H) | 165*110 mm<br>6.5*4.4 in                                                     |      | 165*110 mm<br>6.5*4.4 in                                                     |      | 165*110 mm<br>6.5*4.4 in                       |      | 165*110 mm<br>6.5*4.4 in                       |      |
| Wiring Board         | ADP8216DIN(N) P.93<br>ADP8216DIN(P) P93<br>ADP8216DIN(R) P93<br>JS51050 I.12 |      | ADP8232DIN(N) P.95<br>ADP8232DIN(P) P95<br>ADP8232DIN(R) P95<br>JS51050 I.12 |      | ADP8264DIN P.97<br>JS51050 I.12                |      | ADP8265DIN(R) P.98<br>JS51050 I.12             |      |

## Application Tips

### Select the right Wiring board O/P type for your application

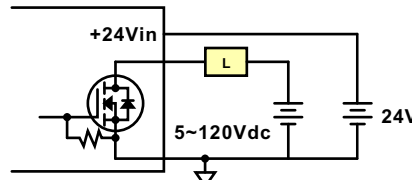
#### ► Selection of P MOS output

The PMOS type output is suitable for load rating < 1A@24Vdc. At a more precise, it is a device that source max 1Adc current at voltage rating under 24Vdc. The switching speed is fast (< 1μs) and the bottle's neck of speed is the photo-coupler (20K) output response.



#### ► Selection of N MOS output

The NMOS type output is suitable for load rating < 1A@120Vdc. At a more precise, it is a device that sink max 1Adc current at voltage rating under 120Vdc. The switching speed is fast (< 1μs) and the bottle's neck of speed is the photo-coupler (20K) output response.



#### ► Selection of Relay output

Relay output is made of mechanical contacts and suitable for both DC and AC load. The contact rating is 3A@30Vdc or 3A@250Vac. Since the relay output is "dry contact", it is widely used in application that needs "switch". The relay speed is slower than PMOS or NMOS the switching speed is about 10ms (max) while operate and 4ms (max) while release.

