

iDAQ-731 iDAQ-751 iDAQ-763D

16-ch IDI and 16-ch Universal IDO iDAQ Module

48-ch TTL Digital I/O iDAQ Module

16-ch SSR Output iDAQ Module



iDAQ-731



iDAQ-751



iDAQ-763D



Specifications

Isolated Digital Input

- Channels 16
- Input type Sink (NPN)
- Input logic level (referenced to DICOM)
 - OFF state 0 V ~ +3 V
 - ON state +10 V ~ +40 V
 - OFF state 1 mA max.
 - ON state 3 mA max.
- Input current draw +60 V max., -8 V min.
- Input protection voltage 100 μ s max.
- Response time 10 μ s ~ 84 ms, software configurable
- Debounce filter 600 VRMS
- Isolation protection Instant or buffered, software configurable
- Acquisition type
- Buffered acquisition
 - Sample rate 10 kHz max., software configurable
 - Internal data buffer (FIFO) size 512 samples, each sample contains state of all channels
- Edge detection Rising edge, falling edge, or both edges, software configurable for each channel independently
- Pattern match detection By port detection, each channel can be enabled or disabled by software independently
- Frequency 1 kHz max.
- Other feature Latch digital input states when interrupt occurs
- Timing signal output to chassis From one of the digital input channels or digital input pattern match event, software configurable

Universal Isolated Digital Output

- Channels 16
- Output type Sink (NPN) or source (PNP), software configurable per port (8-channel)
- Load voltage +10 V ~ +40 V
- Load current 350 mA max. per channel
- Output impedance 0.2 Ω max.
- Response time 100 μ s max.
- Isolation protection 600 VRMS
- Current limit protection Yes
- Flyback diode protection Yes
- Power-on output state OFF state
- Acquisition type Static or buffered, software configurable
- Buffered output
 - Update rate 10 kHz max., software configurable
 - Internal data buffer (FIFO) size 512 samples, each sample contains state of all channels

General

- Power consumption from chassis 425 mW typ. / 450 mW max.
- Dimensions 100 x 80 x 25 mm (3.94 x 3.15 x 0.98 in.)
- Operating temperature -20 °C to 60 °C (-4 °F to 140 °F)
- Storage temperature -40 °C to 70 °C (-40 °F to 158 °F)
- Operating humidity 10% to 90% RH, non-condensing
- Storage humidity 5% to 95% RH, non-condensing
- Vibration 5Grms
- Shock 30G
- Certification EMC: CE, FCC
- Safety: CB, UL

Ordering Information

- iDAQ-731-AE 16-ch IDI and 16-ch Universal IDO iDAQ module

Specifications

- Channels 48, software configurable for input or output
- Digital Input
 - Input logic level
 - Logic high 3.5 V min.
 - Logic low 1.5 V max.
 - Working voltage -0.25 V ~ 5.25 V
 - Input protection voltage 50 k Ω
 - Pull-down resistor 5 μ s max.
 - Response time 5.12 μ s ~ 84 ms, software configurable
 - Debounce filter Instant or buffered, software configurable
 - Acquisition type
 - Buffered acquisition
 - Sample rate 10 kHz max., software configurable
 - Internal data buffer (FIFO) size 256 samples, each sample contains state of all channels
 - Interrupt
 - Edge detection Rising edge, falling edge, or both edges, software configurable for each channel independently
 - Pattern match detection By port detection, each channel can be enabled or disabled by software independently
 - Frequency 1 kHz max.
 - Other feature Latch digital input states when interrupt occurs
 - Trigger output to chassis From one of the digital input channels or pattern match output, software configurable

Digital Output

- Output logic level
 - Logic high 4.0 V min. @ 2 mA source, 5.2 V max.
 - Logic low 0.3 V max. @ 2 mA sink
- Output current
 - One channel 5 mA max.
 - All channels summed 64 mA max.
- Response time 5 μ s max.
- Default output state Logic low
- Acquisition type Static or buffered, software configurable
- Buffered output
 - Update rate 10 kHz max., software configurable
 - Internal data buffer (FIFO) size 256 samples, each sample contains state of all channels

General

- Power consumption from chassis 1.05 W typ. / 1.5 W max.
- Dimensions 100 x 80 x 25 mm (3.94 x 3.15 x 0.98 in.)
- Operating temperature -20 °C to 60 °C (-4 °F to 140 °F)
- Storage temperature -40 °C to 70 °C (-40 °F to 158 °F)
- Operating humidity 10% to 90% RH, non-condensing
- Storage humidity 5% to 95% RH, non-condensing
- Vibration 5Grms
- Shock 30G
- Certification EMC: CE, FCC
- Safety: CB, UL

Ordering Information

- iDAQ-751-AE 48-ch TTL Digital I/O iDAQ module

Optional Accessories

- PCL-10162-1E DB-62 Shielded Cable, 1m
- PCL-10162-3E DB-62 Shielded Cable, 3m
- ADAM-3962-AE DB-62 Wiring Terminal, DIN-rail Mount

Specifications

Solid State Relay (SSR) Output

- Channels 16
- Load voltage 60 VDC max.
- Load current 1.3 A max. @ 25 °C / 0.7 A max. @ 60 °C per channel
- Peak load current 4 A (100 ms, 1 pulse)
- Output impedance 0.13 Ω typ. / 0.5 Ω max.
- OFF-state leakage current 1 μ A max.
- Response time
 - Turn-on time 1.0 ms typ. / 1.3 ms max.
 - Turn-off time 0.6 ms typ. / 0.8 ms max.
- Isolation protection 600 VRMS
- Power-on output state OFF state
- Acquisition type Static or buffered, software configurable
- Buffered output
 - Update rate 500 Hz max., software configurable
 - Internal data buffer (FIFO) size 512 samples, each sample contains state of all channels

General

- Power consumption from chassis 225 mW typ. / 800 mW max.
- Dimensions 100 x 80 x 25 mm (3.94 x 3.15 x 0.98 in.)
- Operating temperature -20 °C to 60 °C (-4 °F to 140 °F)
- Storage temperature -40 °C to 70 °C (-40 °F to 158 °F)
- Operating humidity 10% to 90% RH, non-condensing
- Storage humidity 5% to 95% RH, non-condensing
- Vibration 5Grms
- Shock 30G
- Certification EMC: CE, FCC
- Safety: CB, UL

Ordering Information

- iDAQ-763D-AE 16-ch SSR Output iDAQ module