

Digital Modules

ND-6050

Digital I/O Module

Digital Input

- Channels: 7
- Switching Level: TTL
- Internal Pull-Up Resistor: 10k Ω
- Maximum Current: 0.5mA
- Programmable input polarity

Digital Output

- Channels: 8
- Open collector to 30V, 30mA max. load
- Programmable output polarity
- Programmable power on/safety state

Power

- Requirement: unregulated +10V to +30V_{DC}
- Power Consumption: 0.35W typical



ND-6052

8-CH Isolated Digital Input Module

Digital Input

- Channels: 8
 - 6 independent isolated channels
 - 2 isolated channels with common ground
- Switching Levels (differential)
 - Low (0): +1V (max.)
 - High (1): +3.5V ~ 24V
- Internal Current Limit Resistor: 1.2k Ω
- Maximum Current: 0.5mA
- Isolated Voltage: 5,000V_{RMS}
- Programmable input polarity

Power

- Requirement: unregulated +10V to +30V_{DC}
- Power Consumption: 0.37W



ND-6053

16-CH Digital Input Module

Digital Input

- Channels: 16
- Dry Contact
 - Logical level 0: close to GND
 - Logical level 1: open
 - Effective distance: 500m (max)
- Wet Contact: TTL level
- Internal Pull-Up Resistor: 10k Ω
- Maximum Current: 0.5mA
- Programmable input polarity

Power

- Requirement: unregulated +10V to +30V_{DC}
- Power Consumption: 0.3W typical



ND-6054

15-CH Isolated Digital Input Module

Digital Input

- Channels: 15 bits digital input with 24V external common power
- Switching Level:
 - Low (0): +1V (max.)
 - High (1): +3.5V-24V
- Internal Pull-Up Resistor: 1.2k Ω
- Isolated Voltage: 5,000V_{RMS}
- Programmable input polarity

Power

- Requirement: unregulated +10V to +30V_{DC}
- Power Consumption: 0.25W



ND-6056

15-CH Isolated Digital Output Module

Digital Output

- Channels: 15 bits digital open collector output with common ground
- Switching Level: with +24V common power
- Maximum Load Current: 300mA
- Isolated Voltage: 5,000V_{RMS}
- Programmable input polarity

Power

- Requirement: unregulated +10V to +30V_{DC}
- Power Consumption: 0.25W



Digital Modules

ND-6058

28-CH PPI Module

Programmable I/O

- 8255 programmable peripheral interface mode 0 emulation
- Channel: 24
- Input Signal
 - Logical level 0: -0.5-0.8V
 - Logical level 1: 2.0-5.25V
- Internal Pull-Up Resistor: 10k Ω
Maximum Current: 0.5mA
- Output Signal
 - Logical level 0: 0.5V max.
 - Logical level 1: 2.4V min.

Digital Input

- Channels: 4
- Logical level 0: 2V max.
- Logical level 1: 3-5.25V

Power

- Requirement: unregulated +10V to +30V_{DC}
- Power Consumption: 1.6W typical

Connector

- 50-pin Female SCSI II



ND-6060

Relay Output & Digital Input Module

Relay Output

- Channels: 4 relay outputs
- Output Type: 2 Form C and 2 Form A
- Contact Rating
 - AC 0.6A/125V
 - DC 2A/30V
 - 0.6A/110V
- ON/OFF Interval Time: 3 ms
- Internal Insulation Resistance: 1000M Ω @500V_{DC}
- Expected Life: 2x10⁵ (1A 30V_{DC} resistive)
- Programmable output polarity
- Programmable output power on/safety state

Digital Input

- Channels: 4
- Common External Voltage: +24V or GND
- Current Limit Resistor: 2.2k Ω
- Isolation Voltage: 5000V_{RMS}
- Input Type: Switch or Transistor
- Programmable input polarity

Power

- Requirement: unregulated +10V to +30V_{DC}
- Power Consumption: 1.0W typical



ND-6063

8-CH Relay Output Module

Relay Output

- Channels: 8 independent relay outputs
- Output Type: 8 Form A
- Contact Rating
 - AC 0.5A/125V
 - DC 1A/30V, 0.3A/110V
 - ON/OFF Interval Time: 3 ms
- Internal Insulation Resistance: 1000M Ω @500V_{DC}
- Expected Life: 2x10⁵ (1A 30V_{DC} resistive)

Power

- Requirement: unregulated +10V to +30V_{DC}
- Power Consumption: 0.7W typical



ND-6067

8-CH AC Relay Output Module

Relay Output

- Channels: 5 independent relay outputs and 3 common source relay outputs
- Output type: 8 from A
- Contact rating:
 - AC 3A/250V
 - DC 3A/30V
- ON/OFF time interval: 6ms
- Insulation resistance: 1000 M Ω minimum (at 500V_{DC})

Power

- Power Requirement: +10V to +30V_{DC} Unregulated with against power reversal
- Power Consumption: 120 mW



ND-6080

2-CH Counter/Frequency Input Module

Counter Inputs

- Channels: Two independent 32-bit counter
- Input Frequency: 100KHz max.
- Input Mode: isolated or non-isolated
- Isolation Voltage: 5000V_{RMS}
- Isolation Input Level
 - Logical level 0: +1V max
 - Logical level 1: 3.5V to 30V
- Current Limit Resistor: 1.2k Ω
- Non-Isolated Input Level programmable threshold
 - Logical level 0: 0V ~ +5V (default = 0.8V)
 - Logical level 1: 0V ~ +5V (default = 2.4V)
- Input Pulse Width: > 10 μ sec
- Max Count: 4,294,967,295 (32-bit)
- Programmable Digital Noise Filter: 4 μ sec to 1.02 msec
- Alarm: alarm comparator on each counter

Frequency Measurement

- Range: 1Hz to 100KHz
- Programmable built-in gate time: 1.0/0.1sec

Digital Output

- Channels: 2
- Open collector to 30V, 30mA max. load

Power

- Requirement: unregulated +10V to +30V_{DC}
- Power Consumption: 2.0W



1
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2
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3
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4
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5
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6
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7
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8
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9
Software