Programming Automatic Controller(PAC)

DAM-6000 Series Modules

DAM6000 series through multi-channel I/O modules for data acquisition and process control, and provides flexible data acquisition and control applications for industrial application. This product consists of two parts: the base (main unit) and I/O modules. The main unit contains two parts: DAM6600Distributed RS-485/Ethernet data acquisition and control system, DAM6800 visual data acquisition and control system.



DAM-6600

- 8-Slot ARM7 Processor Distributed RS485 / Ethernet Data Acquisition and Control System
- ※ ARM7 processor
- * Intelligent RS485 automatic data flow control with built-in RS232 communication
- * Transmission Speed: can be up to 115200bps
- * 10/100 Base-T Ethernet interface
- X Support Modbus RTU and Modbus TCP (Server, Client) protocol
- * 2-channel CAN bus interface
- * Can be connected with 8 pieces of DAM-6000 series I/O modules simultaneously



DAM-6800

8-Slot ARM9 processor distributed RS485 / Ethernet data acquisition and control system

- ***** ARM9 processo
- $\ensuremath{\mathbb{X}}$ With built-in WinCE OS, so users can develop with EVC or VS programming language
- * Can be connected with Keyboard and Mouse
- $\ensuremath{\mathbb{X}}$ With VGA interface, can connect with the 800*480 resolution (max) display screen
- * 10/100 Base-T Ethernet interface
- X Support Modbus RTU and Modbus TCP (Server, Client) protocol
- X Can be connected with 8 pieces of DAM-6000 series I/O modules simultaneously

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The Following Modules Belong to the DAM-6000 Series I/O Modules

DAM6013

- 3-Channel Hot Resistance Input Module
- Resolution: 16-bit
- X Number of Channels: 3-channel hot resistance input (It can be configured as PT100, Cu50 or Cu100 hot resistance input by software configuration)
- X Isolation Voltage: 3000Vrms
- * Input Connection Type: 2-wire, 3- wire or 4-wire
- Sampling Rate: 10Hz
- * Input Impedance: 2M
- ※ Accuracy: ±0.1%
- ※ Zero Drift: 0.5uV/℃
- ※ Full-Scale Drift: 1.0uV/℃
- ※ CMR @ 50/60Hz: 100dB
- * NMR @ 50/60Hz: 100dB
- ※ Power Consumption: 1.2W (+5V power supply)



- 7-Channel Thermocouple Input Module
- ※ 16-bit resolution
- ※ 7 differential inputs
- ※ Input Signal Type: T/C, mV, V or mA (software configuration)
- Input Signal Range: ±15mV, ±50mV, ±100mV, ±500mV, ±1V, ±2.5V, ±20mA
- **3000V DC isolation**
- * External cold junction compensation
- * Sampling Rate: 10Hz
- **%** Input Impedance: 2M
- ※ Accuracy: ±0.1%
- Full-Scale Drift: ±25ppm/°C
- ※ Zero Drift: ±0.5uV/℃
- ※ CMR @ 50/60Hz: 150dB
- * NMR @ 50/60Hz: 98dB
- Power Consumption: 1.2W (+5V power supply)

- 16-Channel Digital Input or 16-channel Digital Output Module
- Digital Input/Output Channels: 16
- ※ I/O Type: each channel can be set to input or output by DIP switch
- **※** Digital Input:

Dry Contact:

Logic level 0: ground

Logic level 1: open circuit

Logic level 0: +2V (max)

Logic level 1: +4V ~ +30V

- ※ Digital Output: Open-collector 30V
- ※ 100mA and 450mW maximum load
- ※ Power Consumption: 0.35W (typical) (70mA)

1.2W (maximum) (240mA)



DAM6051S

- 16-Channel Isolation Digital Input Module with LED Display
- * 16 channels isolated digital inputs
- ※ Input Voltage Level:

Logic level 0: +3V (max)

Logic level 1: 10V ~ 50V

- ※ Optical Isolation: 2500V DC
- LED Indicator:

ON: working

OFF: is not working

※ Power Consumption: 0.8W (typical)



- 8-channel Analog Input Module
- ¾ 16-bit resolution
- * Analog Input Channels: 8 differential inputs
- ※ Input Signal Type: mV, V or mA (software configuration)
- \times Input Signal Range: ± 150 mV, ± 500 mV, ± 1 V, ± 5 V, ± 10 V, ± 20 mA
- ※ Accuracy: ≤ ±0.1%
- * Sampling Rate: 10Hz
- * Current Mode: internal resistance is 120
- \times Voltage Mode: input impedance is $8M\Omega$
- ※ Zero Drift: 4uV/℃
- ※ Full-Scale Drift: ±25ppm/℃
- **X** CMR @ 50/60Hz: 150dB
- * NMR @ 50/60Hz: 98dB
- * Power Consumption: 1.2W (+5V power supply)

DAM6024

8-Channel Analog Output Module

- ※ 12-bit resolution
- ¾ 4 voltage or 4current outputs (software configuration)
- ※ Isolation Voltage: 3000V DC
- Output Range: 0~20mA, 4~20mA, 0~10V
- ※ Accuracy: voltage output: ±0.2% current output: ±0.1%
- Zero Drift: voltage: ±30uV/°C

current: ±0.2uV/°C

- ※ Temperature Coefficient: ± 25ppm/°C
- ※ Current Load Resistance: 500Ω
- Power Consumption: 2W (+5V power supply)

DAM6051D

16-channel Digital Input Module with LED Display

- ※ Circuit Type: pull-up current: 0.5mA (source)
- ※ Input Voltage Level:

Logic level 0: +1 V (max)

Logic level 1: +3.5V ~ 30V

LED Indicator:

ON: the input logic level 1 input floating

OFF: the input logic level 0

* Power Consumption: 0.3W

8-channel Isolation Digital Input Module

- ※ 8 channel isolated digital inputs
- ※ Input Voltage Level:

Logic level 0: 1V (max) Logic level 1: 3V ~ 30V

- ※ Optical Isolation: 5000Vrms
- ※ Power Consumption: 0.3W





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DAM6055S

8-Channel Isolation Digital Input /Output Module with LED Display

- * 8 channels isolated digital input/output
- **X** Digital Input:

Dry Contact:

Logic level 0: open circuit

Logic level 1: ground (DIx connects with GND0)

Wet Contact:

Logic level 0: +3V (max)

Logic level 1: $\pm 10V \sim \pm 50V$ (DIx and COM)

- * Digital Output: Open-collector 40V, 200mA maximum load
- **%** Optical Isolation: 2500V DC
- X Over-voltage Protection: 70VDC
- * LED Indicator: ON for working
- Power Consumption: 0.68W (+5VDC power)



DAM6056S

16-channel Isolation Open-collector Output

Module with LED Display

- * 16 channels isolated digital output
- Digital Output: Open-collector 40V, 200mA
- ※ Optical Isolation: 2500V DC
- * LED Indicator: ON for working
- ※ Power Consumption: 0.6W (typical)



DAM6056D

16-Channel Digital Output Module with LED Display

- M. Digital Output Channels: 16
- Digital Output: Open-collector 30V, 100mA
- Loss Power Consumption 450mW
- * Solid-state relays can be controlled
- **※** LED Indicator:

ON: output logic level 1

OFF: output logic level 0

* Power Consumption: 0.3W



6-Channel Relay Output Module

- * Output Channels: 2 channels A relay output
 - 4 channels C relay output
- ※ Contact Rating: AC: 125V@0.6A

250V@0.3A

DC: 30V@2A

- 110V@0.6A
- Isolation Resistance: 1000MΩ @ 500VDC
- Switching Delay Time: ON: 3ms

OFF: 5m

※ Power Consumption: 1.8W (max)



DAM6068

8-Channel Relay Output Module

- X Output Channels: 8 channels A relay output
- Contact Rating: AC: 125V@0.5A

DC: 30V@1A

- ※ Isolation Resistance: 1000MΩ @ 500VDC
- ※ Switching Delay Time: ON: 3ms

OFF: 3ms

※ Power Consumption: 1.8W (max)



DAM6069

8-channel A-type Relay Output

- ※ Output Channels: 8 channels A-type power relay output
- ** Contact Rating: AC: 250V@5A

DC: 30V@5A

- % Isolation Resistance: $1000M\Omega$ @ 500VDC
- LED Indication: ON for working

OFF for no working

Switching Delay Time: ON: 10ms

OFF: 5ms

Power Consumption: 2.2W (max)



DAM6080

4-Channel Counter / Frequency Module

- * 4-channel 32-bit counter
- * Input signal can be set to isolated or non-isolated (jumper selectable)

1~1000HZ max (frequency mode)

5000HZ max (counter mode)

- * Mode: count (double-pulse, single-pulse) frequency
- ※ Isolation Voltage: 2500Vrms
- ※ Input Voltage:

Isolation: logic level 0: +1V (MAX)

logic level 1: + 3.5V~ 30V

logic level 1: 2.3V~ 5V

Non-isolated: logic level 0: 0V $\sim 0.8 V$

- ※ Programmable Digital Noise Filter: 8~65000μsec
- Power Consumption: 1W (+5VDC power)



DAM6081

4-Channel High-speed Counter/Frequency Module

- * 4-channel 32-bit counter, the max count value is 294967295
- ※ Input Frequency:

5~1MHz max (frequency mode)

1MHZ max (counter mode)

- Mode: count (double-pulse, single-pulse) frequency
- * Input signal can be set to isolated or non-isolated (jumper selectable)
- ※ Input Voltage:

Isolation: logic level 0: +1V (MAX)

logic level 1: +10V~ +30V

Non-isolated: logic level 0: 0V ~+ 0.8V

logic level 1: 2.3V~ +5V

- ※ 4-channel open-collector output, maximum load 30V, 100mA
- ※ Power Consumption: 1.5W