



FEATURES

- Remote access and control from a host computer through RS232
- Powerful standalone operation
- Easy-to-learn programming language
- Up to 256K bytes EEPROM for programs and data
- General-purpose digital inputs and outputs
- 5-channel analog to digital converter
- Programmable DC output voltage and polarity
- High-current DC output
- High-current relays for DC and AC power control
- Temperature measurement
- 24-bit encoder counters for motion control
- Encoder line receivers for long distance control
- Programmable limit switches
- 40-bit timer in milliseconds for accurate time control
- Linearly-regulated output voltage--no electrical noise as PWM
- Support for joysticks
- Custom front and back panels
- Application development kit

DESCRIPTION

The ASC8 is a general purpose industrial controller for motion control, process control, and other industrial controls. The controller can be used for:

- Process machines
- Assembly lines
- Conveyer belts
- Milling machines
- Material cutting machines
- Robot controls
- Inspection scanners

It is also capable of controlling various electrical devices, such as solenoids, valves, lights, fans, heaters, agitators, electrical magnets, DC motors, motor brakes, and magnetic clutches. The devices are controlled with respect to time, voltage, current, input status, and outside environments. The ASC8 can also handle signals from sensors such as potentiometers, joysticks, buttons, switches, thermistors, infrared sensors, proximity sensors, and encoders.

The ASC8 is controllable through a host computer via RS-232 ; it can also run standalone, executing a downloaded program from the computer.

There is one relay output and one adjustable DC output for each axis being controlled. The relay output can be connected to an AC power source or to a 24VDC internal power supply. The voltage of the DC output is adjustable from 5V to 21V, and the polarity can be either positive or negative. The ASC8 can control up to 8 axes. Other features include:

- TTL/CMOS digital inputs
- Digital inputs for front panel buttons and switches
- TTL/CMOS digital outputs
- Programmable limit switch inputs
- Analog to digital inputs
- Input for emergency stop switch

- Temperature measurement
- 300 mA OC output for each axis
- Additional I/O available upon request
- Current monitoring optional

US Ultratek provides a complete programming environment, including a software package, program reference manual, and a RS-232 programming cable. Some sample programs are capable of such tasks as:

- Monitoring input levels and states
- Monitoring front panel buttons and switches

SPECIFICATIONS

Input/Output 8 TTL/CMOS digital inputs
 6 digital inputs for front panel control
 8 TTL/CMOS digital outputs
 5 analog to digital inputs
 1 input for emergency stop switch
 1 300 mA OC output per axis
 2 programmable limit switch inputs / axis

DC Output Voltage ±5V to ±21V @6A / axis

Relay Output 24VDC or AC power @5A / axis

Options Additional I/O pins available

Program Memory 64KB standard, up gradable to 256KB

Temperature Measurement -40EC to 125EC with thermistors

RS-232 9600 BAUD rate, 8 data bits, 1 stop bit, no parity

Encoder Inputs Differential line receiver, TTL compatible

Encoder Counter 24-bit resolution

Internal Timer 40-bit timer in milliseconds counting up to 34 years

Analog Inputs 0 - 5V converted to 0 to 255

Software Specs Automatic run on power-up
 Nested FOR/NEXT loops up to 5 times
 Nested function calls up to 25 times
 16 32-bit variables
 16 8-bit variables
 96 bytes incoming buffer for RS232

Dimensions 10" (W) x 3.9" (H) x 9.6" (D)

Universal Power 100-240VAC 50/60Hz

APPLICATION EXAMPLE: PARTS WASHING SYSTEM

