



DIGITAL INPUT / OUTPUT

MODEL: DIO-080202



EXPANSION MODULE

SUPPORTS ALARM GATEWAY CONTROLLER

OVERVIEW

The Digital Input/Output (DIO-080202) works with Alarm Gateway Controller (AGC-080202) as an expansion module. Just like AGC-080202, it is low cost maintenance and easy to install & support. Equipped with input channels for sensing or metering, output channels for control, indication or alarms and a communications port. It is able to interface to any equipment or device to provide wireless SMS alerting, remote monitoring and control.



DESKTOP PC OR LAPTOP
LOCAL OR REMOTE MANAGED



Relay Output ●

Logic Expression to turn ON/OFF devices automatically



Digital input ●

Remote Monitor devices



FEATURES

- Transparent Modbus RTU/TCP gateway
- Standalone, housed in a compact & robust chassis
- HTML interface, provides access from any web browser
- Network-enabled (TCP/IP over UTP Ethernet)
- DHCP or Static support
- 8 protected universal digital inputs. Accepts dry contact or voltage input up to 30 volts
- 2 relay outputs rated at 30VDC 2A
- 2 analog input 4-20mA
- Remote phone numbers management
- Local & Remote On/Off/Pulse digital outputs
- Automatically turn On / Off device with Logic Expression
- Select Output state from On, Pulsating, Delay ON or One-shot when Logic Expression is true
- Select Output state ON/OFF time intervals
- Input state response time to minimise sudden surge (eg. Power supply, UPS)
- Select Input state NC or NO to be Alarm state
- Time Zone synchronise with NTP server

APPLICATIONS

Data Centre

UPS, Air-con, Router, Server, Fire alarm panel, Generator, Water leakage detector, Security, Lighting, Power quality /distribution

Manufacturing Process

Process error, PLC, Sensor, Machine status, Vision, Alarm signals, Vacuum, Electric transformer, Pressure valve, Gas tank, Over voltage

Telecommunication

Power, Water leakage detector, Air-con, UPS

Fire and Security

Door Sensor, Temperature, Smoke detector, Alarm panel, Annunciator

Facility Maintenance

Lift, Elevator, Pump, ATS, Gen Set, Chiller, HVAC, HT/LT, Oil temperature, Oil pressure, Water level

Energy & Power Management

Voltage sag, Over voltage, Under voltage, Power outage, DC system

Environmental

Temperature, Humidity, Co2, Wind speed, Water

HVAC

Run, Trip, Fault

M & E Facility Management

Tracking, Maintenance

| SPECIFICATIONS

PHYSICAL	
Operating Voltage	9 to 30VDC, 2W
Processor	32 bit 50MHZ microcontoller
Memory	Non volatile storage memory stores history logs with Date and Time stamp, FIFO event recording
Humidity	0 - 90% non condensing
Operating Temperature	0 - 55 degree celsius
Physical size	70 (L) x 38 (H) x 100 (D) mm
Weight	200 gm
Mounting	Industrial standard ABS housing with Din rail mounting, Pluggable 5mm screw terminal block
Security Feature	2 Level security, Administrator and User level
Date & Time	Support NTP server time zone sychronisation
Real Time Clock	Date time with battery backup
LED Indicators	a) 2 amber indicator for inputs X1-X6 b) 2 amber indicator for inputs X7 A1 & X8 A2 c) 2 green indicator for relay outputs Y1-Y2
Communication port	1 x RJ45 port, Ethernet 10/100Mbit
Interface	HTML interface, accessible via web browser software
NETWORK	
Network support	DHCP or Static support
Network protocol	a) TCP (Transmission Control Protocol) b) IP (Internet Protocol) c) UDP (User Datagram Protocol) d) HTTP (Hyper Text Transfer Protocol) e) DHCP client (Dynamic Host Configuration Protocol) f) DNS (Domain Name Server) g) SNTP (Simple Network Time Protocol) h) Modbus/TCP
Environment	SCADA or HMI applications via ModbusTCP
DIGITAL INPUT	
No of Input points	8 optically coupled dry contact or voltage inputs
Configuration	Independent configuration of input description, open/close status description
Input Response Time	Individual selection of response time for each input from 2 to 30 secs (trigger sensitivity)
RELAY OUTPUT	
No of Output points	2 relay outputs,contact rated at 30VDC 2A
Configuration	User defined output description
Output control	Through SMS, Local or Logic Expression On / Off relay outputs through web browser
Logic Expression	Program through simple Boolean Expression operator to control Output state automatically
Output state	Individual selection of Output state: On, Pulsating, Delay ON or One-shot using Logic Expression
Output state time intervals	Individual selection of ON/OFF time intervals from 0.2 to 30 secs
ANALOG INPUT	
No of Analog points	2 analog input, 4-20mA
Configuration	Configurable input description, scaling, trigger delay, high/low alarm points.

| USER FRIENDLY WEB INTERFACE

pb DIGITAL INPUT / OUTPUT
MODEL: DIO08202

Device ID: DIO Controller
IP Address: 192.168.1.21 (Static)
Login: Administrator
Date & Time: 29/12/2009 14:30:25

Input	Description	Status
X1	Power Supply in Basement 1	Normal
X2	Water Detection System	Water Detected
X3	Aircon in Server Room	Normal
X4	Poolside Emergency Button	Normal
X5	UPS in Server Room	Battery Mode
X6	Fire Alarm Panel in Security Room	Alarm
X7	Booster Pump in Pump Room	Normal
X8	Main Door Reception	Door Close

Output	Description	Status	Control
Y1	Buzzer	ON	Logic <input type="radio"/> ON <input type="radio"/> OFF
Y2	Beacon	OFF	Logic <input type="radio"/> ON <input type="radio"/> OFF

Analog	Description	Status	Value
A1	Server Room Temp	High	30.5 degree
A2	Server Room Humidity	Normal	58.6 RH

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| EXPANSION



ACG-080202

DIO-080202

SINGLE EXPANSION

Using a Ethernet cross cable, ACG-080202 can be connected to an expansion module - Digital Input/Output (DIO-080202). It can be easily add-on to an existing Alarm Gateway Controller to increase the number of input and output.



MULTIPLE EXPANSION

Using an existing office network or industrial network to support this expansion or Implement a separate network using Ethernet switch or hub with additional expansions to increase the input / output capacity for monitoring. No limitation in the number of expansions.

Authorised Distributor/Reseller

*All specification subject to change without prior notice