

# Danntech Process Instrumentation

*Danntech*

## 16 Digital Output Module 24/12 VDC

**Price:** [Call for Pricing](#)

Sixteen isolated digital (transistor) outputs 50 V DC at up to 1 A. ASCII or Modbus RTU communications using RS232 or RS485. Plug-in screw terminal connections. 24 or 12 VDC power. Up to 32 modules can be multi-dropped using RS485 with the same wire pair up to 1000 m. Customised applications using other products.

### Specifications:

- DIN rail mounting.
- Power requirement 24 VDC (23 V to 27 V) at 100 mA, 5 W or 12 VDC at 200 mA.
- 2 kV isolation between each output and the control circuitry.
- Watchdog used to constantly monitor the microprocessor power and activity.
- Various LEDs are used to indicate power supply status, communication status (RX and TX), microprocessor status and the state of each output.
- Both RS485 and RS232 serial communications at 9 600 bits/sec and 19 200 bits/sec.
- Operating temperature -10 °C to 60 °C.
- Dimensions 110 x 260 x 30 mm (width x length x height).
- Mass approximately 200 g.

### Serial communication using the Remote Magic Protocol:

@address, command, register, data, checksum

where: @ - this character must be transmitted to signal the start of the command sequence

address - the module address

command - 1 ReadConfiguration

sssssss.ss. 2 Read Registers

sssssss.ss. 3 Write Registers  
sssssss.ss. 4 not used  
sssssss.ss. 5 Read Run Time  
sssssss.ss. 6 not used  
sssssss.ss. 7 Read Bulk Data  
sssssss.ss. 8 Identify All Attached

register - the register number as applicable to the respective command.

data - the data as applicable to the respective command.

checksum - the checksum is the sum of all the values (excluding the start character) modulo 216. Note that the checksum is a 16-bit number which wraps around through zero should the sum exceed 65535 i.e. if the sum of the data from the address through to data is 65537 then the checksum should be sent as 1.

All values are 16-bit (unsigned integers - 0 to 65535) except for the address and commands which range from 0 to 255. Upon receipt of any command between 1 and 2 (i.e. checksum matches and command is recognized) the module will reply with a copy of the original command with the command value increased by 128 (i.e. the most significant bit is set); data is the requested data.

### [Vendor Information](#)