Product Sheet

Input–Output Expansion Unit

20-03-0000

The 20-03-0000 is an I/O expander module which provides four relay outputs, and eight open drain I/O pins which also serve as inputs. I/O expander for the Salcom 20-62 transmitter or Salcom 20-90 transceiver.

Product code
20-03-0000

Key Features

- I/O expander for the Salcom 20-62 transmitter or Salcom 20-90 transceiver
- Bidirectional point-to-point control over serial or radio link
- Expandable further by daisy chaining Salcom 20-03 units
- Four relay outputs with normally open and normally closed contacts
- Eight bidirectional inputs generate user defined serial messages for rising and/or falling edges
- Input pins can be configured as additional open drain outputs
- Compatible with Salcom message protocol
- Flexible output activation options
- Control over Ethernet using third party serial to Ethernet adapters
- Provides Input and Output capabilities for PC's, PLC's, and micro controller projects
- Can generate regular watchdog messages to check serial and radio link integrity

Capabilities

POCSAG Message Activation: Outputs can be activated by POCSAG messages embedded with Salcom Relay Protocol commands. Activation can be restricted to specific CAP code ranges or triggered by any message sent to a CAP code within the range.

Serial Data Control: Outputs can respond to specified text within the serial data.

Input-Triggered Messaging: Inputs can generate Salcom protocol POCSAG messages over a serial connection, which can be transmitted to a pager using a Salcom 20-90 transceiver or a Salcom 20-62 transmitter. Inputs can also be configured to send any ASCII text over the serial connection in response to an input change.

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salcom

Technical Specification

Input / Output Expansion Module - 20-03-0000

Power Supply	+13.8V typical (11 to 15 VDC range)
Power Consumption	Normal Operation: 15mA Relays: 20mA per energized relay
Configuration Application	Salcom Configuration Tool (Sacoto)
Programming Cable	12-45-0000 (RJ12 to DB9) Can be used with a USB to RS232 DB9 Serial Adapter Cable
Serial Port	2 ports, 9600, N, 8, 1; RS232
Serial Protocols	Salcom Relay protocol Salcom Message protocol ASCII strings to trigger outputs ASCII messages triggered by inputs Multiple units may be daisy chained for additional inputs or outputs, or to create a bi-directional link between inputs and outputs on separate units.
Relay Outputs	4 Relays with normally open and normally closed contacts 1A@4Vdc
Open Drain Outputs	Eight open drain outputs with 500mA resettable fuses (PTC). Selectable as 5mA current limited. Internal protection for inductive loads. Maximum voltage = supply voltage.
Inputs	8 inputs monitoring the open drain outputs. Open drain outputs have an internal pull-up to 3.3v (4k) and maybe pulled low externally.
Connectors	Two-way pluggable DC power connector Serial Port 1 (RS232) = RJ12 (6P6C) Serial Port 2 (RS232) = RJ12 (6P6C) Terminal block: 2 rows x 12 way, 3.81mm pitch. Two 12-way plugs with screw connections (supplied)
Environmental Protection	Not suitable for outdoor use and should be protected from adverse environmental conditions
Operating Temperature	-10°C to +50°C (+14°F to +122°F)
Indicators	Power LED (Green) • Slow Flashing = Normal Operation Data LED (Red) • On = Active Serial Data • Flashing = Programming Mode
Weight	250g
Enclosure Dimensions	68mm x 150mm x 38mm (WxDxH)
Enclosure Material	Extruded aluminum
Colour	Matt Black
Compliance	EN 301 489-2 (V2.1.1, 2019-04)

NB: All specifications and applications are indicative only and subject to change without prior notification.

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