

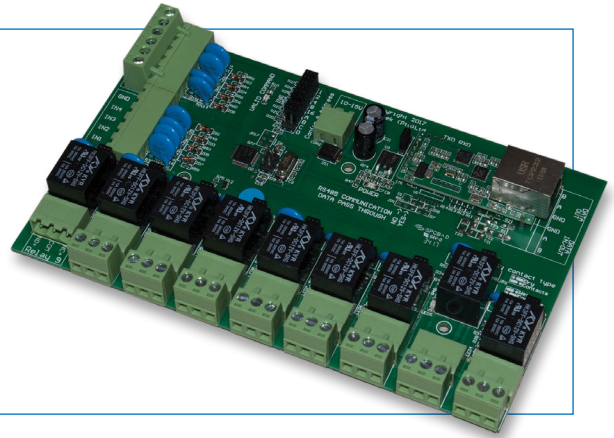
# DATA SHEET

## NETWORK IO CARD (8 input/8+1 output)

**NEMTEK**  
Electric Fencing Products



The 8-way network IO card provides 8 digital inputs linked together via common ground, and 8 user relays plus 1 comms-relay, each with normally open and normally closed contacts. The relay contacts can be configured to be potential-free, independent, dry contacts, or set to wet contacts with a common ground and a nominal 12V output. The IO card is typically used as an interface between a network containing an FG7 (FG-DRUID), Druid 25 LCD (E-DRUID/25/LCD) or Druid 28 LCD (E-DRUID/28/LCD) energizer, and third-party systems, but is a general input-output device.



### FEATURES

- 8 digital inputs (linked via common ground)
- 8+1 relay outputs (8 user relays + 1 valid comms relay)
- Robust surge protection is included on all inputs and outputs
- All relays can be individually configured to be independent dry contacts or common-ground wet contacts with 12V nominal output
- Each relay has a very useful LED indicator to show if the relay is energized
- 3 communications debug LED indicators for TX, RX and VALID COMMAND
- 1 power-on LED indicator
- In addition to the input states, the IO card also reports back temperature and supply voltage level
- Up to 31 unique addresses can be set using on-card jumpers
- AES-128-level encryption can be jumper activated
- Available with ethernet (EE-FG108/NL) or RS485 (EE-FG108/485) interface options
- The RS485 option can be set to daisy chain (with or without data pass through) or multi-drop mode
- Removable connectors to ease replacement
- Designed to mount into a Nemtek battery-backed power pack (PP-2.0AMP)

### SPECIFICATIONS

Size	L180mm x W112mm x H22mm
Weight	~250g
Operating environment	-20°C – 55°C @ 10% – 90% RH (non-condensing)
Power supply	10V – 15V DC
Current consumption (ethernet option)	120mA + 40mA per energized relay
Current consumption (RS485 option)	40mA + 40mA per energized relay
Relay contact rating (dry contacts)	1.0A @48V AC/DC per relay
Relay output (wet contacts)	Supply voltage @ 1A max, shared amongst all active wet contacts
Digital input rating	-10V – 1V = (0/Off) and 3V – 15V = (1/On)
Digital input, internal pull-up	10kΩ to supply voltage
Digital input impedance	~1kΩ connected to a 5V sink (not a source)
Temperature reporting	1°C resolution (typically ±3°C initial accuracy)
Supply voltage reporting	125mV resolution