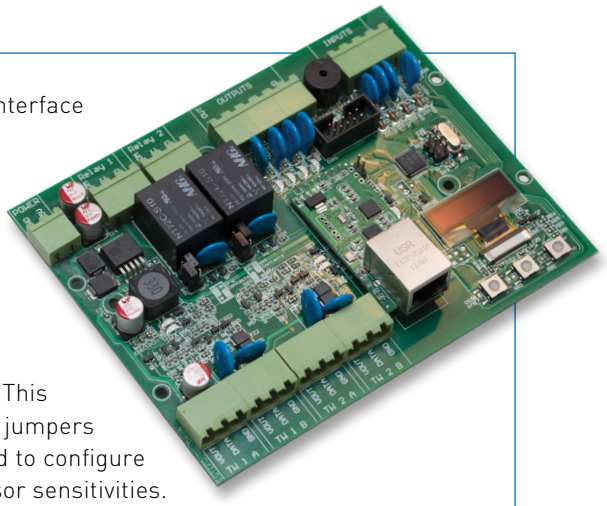
DATA SHEET
TAUT WIRE NODE CONTROLLER

NEMTEK
Electric Fencing Products



The Nemtek Taut Wire node controller provides a communication interface to the Nemtek Taut Wire (TW) sensors and any other third-party security systems.

Two separate sensor input channels are provided – each capable of accommodating up to 31 TW sensors. Each channel provides a relay output, which will energise a configurable wet or dry contact in an alarm situation.

The TW node controller can be easily configured and programmed. This can be done by using the on-board OLED display, push buttons and jumpers provided. Alternatively, the configuration software tools can be used to configure the TW node controller and also programme the individual TW sensor sensitivities.

There are two variations to the TW node controller. The TW Node1 (E-TW/NODE1) can communicate and interface to third-party security systems through an ethernet port (Nemlink) on a network.

The second variety of TW node controller, the TW Node2 (E-TW/NODE2) can communicate and interface to the third-party security systems through the two relays provided.

The TW node controller can be installed inside a Nemtek battery-backed power pack (PP-2.0AMP), which can be powered from a standard 240V/50Hz household socket and includes battery backup in the event of power failure.

FEATURES

- Robust surge protection is included on all inputs and outputs
- 2 relay outputs (individually configured to be independent dry contacts or common-ground wet contacts with 12V nominal output)
- 4 digital inputs (linked via common ground)*
- 4 digital outputs (linked via common ground. Outputs are open-collector potential free)*
- Each relay has a very useful LED indicator to show if the relay is energised
- 3 sets of communications debug LED indicators for TX and RX: two for the TW sensor channels and one for the ethernet port
- 1 power-on LED indicator
- Temperature and supply-voltage-level monitoring can be reported
- Up to 31 TW sensors per channel
- Removable connectors ease replacement
- Designed to mount into a Nemtek battery-backed power pack (PP-2.0AMP)

* Digital inputs and outputs can only be configured with network commands

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SPECIFICATIONS

Size	L140mm x W110mm x H22mm
Weight	~170g
Operating environment	-20°C – 55°C @ 10% – 90% RH (non-condensing)
Power supply	10V – 15Vdc
Current consumption (ethernet option (Nemlink), E-TW/NODE1)	300mA + 40mA per energised relay + 9mA per TW sensor
Current consumption (relay only option, E-TW/NODE2)	220mA + 40mA per energised relay + 9mA per TW sensor
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 per channel	-10V – 1V = (0/Off) and 3V – 15V = (1/On), internal pull-up 10kΩ to supply voltage
Digital-input impedance	~1kΩ connected to a 5V sink (not a source)
Digital output maximum rating per channel	38Vdc/60mA (open-collector potential free)
Taut wire maximum rating per channel	350mA (limited by resettable fuse)
Temperature reporting	1°C resolution (typically ±3°C initial accuracy)
Supply-voltage reporting	125mV resolution
Network communication	Ethernet RJ45 10/100Mbps

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