

# NEXUS 500 series electrofusion control unit



welding systems for the jointing of electrofusion fittings - suitable for use with all voltage regulated pipes and fittings as used by the gas, water, chemical and communications industries

Designed for maximum versatility, the **NEXUS 510\*** is available with: basic manual input; data retrieval OR barcode scanning; data retrieval AND barcode scanning.

**NEXUS 520** is also available for 'traceability barcode' and 'operator badge' recognition.

\* see separate price list for full model listing



## SPECIFICATIONS

	NEXUS UNIT	COMBI-UNIT
input voltage	110V or 220V AC RMS	110V AC RMS
output voltage	8 to 48V	8 to 48V
output current	60 Amps	60 Amps
temperature range	-10 to +50°C	-10 to +50°C
dimensions	410W <sup>a</sup> x 180D x 330H mm	1050L x 615W x 730H mm
dimensions - hand-held unit	116W x 220D x 119H mm	116W x 220D x 119H mm
net weight	20.0Kg	100.0Kg
net weight - hand-held unit	0.6Kg	0.6Kg
seal rating (inc. hand-held unit)	IP65	NEXUS - IP65; Generator - N/A
temperature compensation	YES - in barcode mode	YES - in barcode mode
output lead length	3 metres (permanently attached)	6 metres (permanently attached)
input lead length	3 metres (permanently attached)	N/A
standard terminal size	4.0 and 4.7mm	4.0 and 4.7mm
memory storage capacity	minimum 1000 joints	minimum 1000 joints

<sup>a</sup> ECU 500mm wide overall including cable glands. Please enquire for special application ECU's and different lead lengths.

## FEATURES

- Standard operating modes: **MANUAL INPUT (39.5V)** - manual data entry fixed voltage output; **MANUAL INPUT (8 to 48V)** - manual data entry variable voltage output; **BARCODE RECOGNITION** - barcode scanning of fusion data using CCD gun type scanner, to ISO TR 13950
- Self monitoring - NEXUS supplies a constant output voltage. In addition to monitoring its own functions, the unit checks the power inlet and outlet, prompting the user if any parameters fall outside pre-determined limits. The joint heater coil integrity is also monitored throughout the cycle.
- O-ring sealed case provides tough, water resistant protection for the unit.
- The controls are housed in a separate hand-held unit with a low working voltage, which is attached with a 3m cable (detachable). The hand-held controls prove beneficial when working in awkward areas, and include an RS 232 port for removal from the main ECU for data retrieval to a PC or printer.
- Simple, step-by-step instructions guide operator through the electrofusion process.
- Alpha-numeric keypad with a back-lit, multi-line LCD display. LCD displays the fusion time, fusion voltage, fusion current and ambient temperature, then counts down during the fusion cycle.
- Operator code entry available through hand-held unit. Operator code and joint information can be stored and retrieved.
- Audible warning - joint result message and fusion status buzzer indication.
- Built-in real time clock provides date and time.
- Accessories available: terminal pin adaptors; barcode scanners (CCD gun type); PC software and RS 232 printers (for option of data retrieval).

For electrofusion users who don't already possess a suitable generator, the **COMBI-UNIT** (above) provides a cost effective solution. The **COMBI** combines a generator with a **NEXUS Electrofusion Controller** in one convenient, portable unit; mounted on a two-wheeled trolley for ease of transportation.

The unit provides a standard electrofusion output of 8 to 48V and incorporates all the operational and safety features of the **NEXUS ECU** (including options of data retrieval and barcode scanning).

For guaranteed compatibility, **COMBI** features a 3.5kW (4.4kVA) ECE 3, (TIN 12) specification generator with a Honda GX270 OHV re-coil start 'oil alert' petrol engine, coupled to a brushless alternator, providing 110V output to the ECU.

The correct input power ensures a **high quality** electrofusion joint.



MSA ENGINEERING SYSTEMS LIMITED, 3 Assured Drive, Thurmaston, Leicester, LE4 8BB, United Kingdom  
 phone +44 (0)116 260 8866 | fax +44 (0)116 260 8861 | sales@msa-engineering.co.uk | www.msa-engineering.co.uk  
 Registered Office: 12 Shibden Hall Croft, Shibden Hall Road, Halifax, W. Yorkshire, HX3 9XF, UK | Registered No. 2636196 England

