

FAULT-FREE IDENTICAL ELECTROFUSION JOINTING

# NEXUS 500-LT electrofusion control unit



**MSA**

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

The **NEXUS 500-LT** electrofusion controllers are a **NEW** development of lightweight units. Utilising special transformer technology, the lightweight 'LT' units are still able to function with smaller generator sets (typically 3.5kW/4.4kVA). Having superior performance and reliability, they generate approximately 20% less heat from the transformer on a 220V unit, and approximately 35% less on a 110V unit.



The 110V unit weighs only 17.8Kg, with the 220V unit weighing 19.3Kg. These weights include the 3m input and 3m output leads.

The maximum output current of the NEXUS-LT is 100 Amps (subject to weld voltage). The controls are mounted on the unit itself and feature a metal anti-vandal keypad and 4 line LCD display. Unit options available include a self calibration check using the barcode scanner, GPS co-ordinate monitoring (output for data retrieval), and USB connection.

As an alternative, controls can be supplied in a separate hand-held unit (HHU) with a membrane keypad. Hand-held controls are an advantage for data retrieval (via RS232) as only the HHU needs to be taken to the PC.

**SPECIFICATIONS**

	NEXUS 500-LT 110V	NEXUS 500-LT 220V
input voltage	110V AC RMS	220V AC RMS
output voltage	8 to 48V	8 to 48V
maximum output current	100 Amps	100 Amps
temperature range	-10 to +50°C	-10 to +50°C
dimensions	410W* x 180D x 330H mm	410W* x 180D x 330H mm
dimensions - hand-held unit	116W x 220D x 119H mm	116W x 220D x 119H mm
net weight	17.8Kg	19.3Kg
net weight - hand-held unit	0.6Kg	0.6Kg
protection	IP65	IP65
power rating	3.5kVA MIN	3.5kVA MIN
temperature compensation	YES - in barcode mode	YES - in barcode mode
output lead length	3 metres (permanently attached)	3 metres (permanently attached)
input lead length	3 metres (permanently attached)	3 metres (permanently attached)
standard terminal size	4.7mm	4.0mm
terminal adaptors	4.0mm	4.7mm
memory storage capacity	minimum 1000 joints	minimum 1000 joints
connectivity	RS232 (USB on request)	RS232 (USB on request)
monitoring features	power inlet/outlet, coil integrity	
other features	audible warning, real time clock, user prompts	
fusion information display	fusion time, fusion voltage, fusion current, ambient temperature, fusion countdown, cooling time (optional)	
accessories	CCD gun type scanners, PC software	
specification	ISO 12176-1 & GIS/ECE1	

\* ECU 500mm wide overall including cable glands. Please enquire for special application ECU's and different lead lengths.

**MODELS**

- **NEX510-MI-LT** : manual input (39.5V fixed and 8-48V variable)
- **NEX510-BR-LT** : manual input (39.5V fixed and 8-48V variable), barcode recognition (ISO TR 13950), including CCD gun type scanner
- **NEX510-DR-LT** : manual input (39.5V fixed and 8-48V variable), data retrieval (weld information)
- **NEX510-BD-LT** : manual input (39.5V fixed and 8-48V variable), barcode recognition (ISO TR 13950), data retrieval (weld information), including CCD gun type scanner
- **NEX520-TR-LT** : manual input (39.5V fixed and 8-48V variable), barcode recognition (ISO TR 13950), traceability barcode and data retrieval, including CCD gun type scanner
- **NEX520-TO-LT** : manual input (39.5V fixed and 8-48V variable), barcode recognition (ISO TR 13950), operator badge, traceability barcode and data retrieval, including CCD gun type scanner



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

