

## WDL-3

### Weld Data Logger

The WDL-3 represents leading edge technology in arc welding data collection and logging. The micro controller based weld data acquisition system provides a means of measuring and documenting all basic welding parameters when used with external serial printer or PC. The WDL-3 can store up to 4000 weld summaries in non volatile memory. Additionally the WDL-3 has the unique ability to calculate heat input using the optional travel speed transducer, a user specified Travel Speed or the actual weld length and accumulated arc time. An Ethernet port is available for remote data collection and stored weld summary data upload.



**The WDL-3 is the lightweight portable tool that will enable you to establish and maintain qualified welding procedures.**

### FEATURES

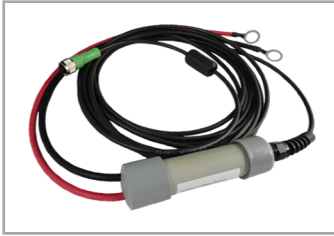
- Data is stored with a Date/Time stamp, Station ID and a sequential weld count number
- Graphic 256x64 pixel display
- Compact NEMA 12 rated enclosure
- Internal Non-Volatile memory to store up to 4,000 welds summaries
- Ability to send data to external printer for hard copy with software selectable print format for 80 or 40 column printers
- Configurable for English or Metric units
- Ethernet port for remote data uploads using Modbus TCP/IP protocol or USB port for PC serial communications with Modbus RTU protocol

### BENEFITS

- Chance of error in recording data eliminated
- Easily transportable between plants or shop locations (ideal for inspectors)
- Instantaneous viewing of current welding conditions (ideal for inspectors)
- Permits extended data logging without need for printer at location (ideal for inspectors and Welding Engineers)
- Ability to collect and display run time welding data using PC and optional ARC Track II™ software
- Ability to generate printed hard copy at job site or back at office location (ideal for inspectors)

# WDL-3 SPECIFICATIONS

## WDL-3 Sensors



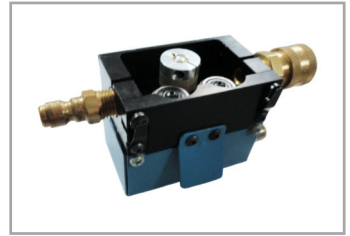
**Arc Voltage**  
0-80 volts DC  $\pm 1\%^*$ ,  
0.1 volt resolution



**Arc Current**  
0-1000 amps DC  $\pm 1\%^*$ ,  
1 amp resolution



**Travel Speed**  
1-100 IPM (0.42-42mm/s)  $\pm 3\%^*$ ,  
0.1 IPM (0.04mm/s) resolution



**Wire Speed**  
10-1000 IPM (4.2-423mm/s)  
 $\pm 3\%^*$ , 1 IPM (0.4mm/s) resolution



Thermocouple



Infrared

### Temperature

Range resolution and accuracy depend on sensor used.  
Consult factory for options.

**Gas Flow**  
5-255 scfh (2-120 LPM),  
 $\pm 2\%$  of full scale  $\pm 1$  digit,  
1 scfh (1 LPM) resolution,  
50 psia (344 kpa)  
Maximum operating pressure



\* % Accuracy is of full scale

### WDL-3 Mode of Operation

Welding parameter data can be sent to an external serial printer for hard copy printout or to a compatible personal computer using the Arc Track II software for data storage and analysis.

### Parameters Monitored / Logged

Current	Voltage
Heat Input **	Travel Speed
Temperature	Elapsed Time
Wire Feed Speed	Shielding Gas Flow

\*\* Heat input is calculated based on optional travel speed sensor or default travel speed or weld length specified by user.

### WDL-3 Sensor Specifications

Dimensions	7.50" L x 4.50" W x 2.50" H (190 mm L x 114 mm W x 63 mm H)
Weight	4 lbs (1.8 kgm)
Power	12-32 vdc @ 0.5 amp (nominal 24 vdc input)
Communications Protocol	Ethernet or USB, and Serial printer interface

### WDL-3 Product Part Number

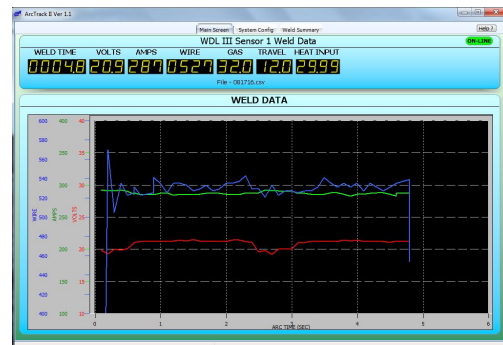
Part Numbers	Description
A0A0171-ETH	WDL-3 System with Ethernet Communications (Arc Voltage and Current Sensors are Included)
A0A0171-USB	WDL-3 System with USB Communications (Arc Voltage and Current Sensors are Included)

### Arc Track II Data Logging Program

The Arc Track II Program is used with the WDL-3 and provides a simple MODBUS terminal to program and download data from multiple WDL-3 devices. The program uses the MODBUS™ RTU protocol to establish communication with multiple WDL-3 devices. Ethernet port for remote data uploads using Modbus TCP/IP protocol or USB port for PC serial communications with Modbus RTU protocol.

Arc Track II™ Software - The PC software provides the following capabilities:

- Run time and Summary Data collection in .csv format
- Graphic display for single weld run time data



### Arc Track II Product Part Number

Part Numbers	Description
A5Z0051	Arc Track II™ Software

**Note: Specifications subject to change without notice.**