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.

**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 ± 1%*,
0.1 volt resolution

**Arc Current**
0-1000 amps DC ± 1%*,
1 amp resolution

**Travel Speed**
1-100 IPM (4.2-423mm/s)
±3%*, 1 IPM (0.4mm/s) resolution

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

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

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

**Gas Flow**
5-255 scfh (2-120 LPM),
±2% of full scale ±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

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>7.50” L x 4.50” W x 2.50” H (190 mm L x 114 mm W x 63 mm H)</td>
</tr>
<tr>
<td>Weight</td>
<td>4 lbs (1.8 kgm)</td>
</tr>
<tr>
<td>Power</td>
<td>12—32 vdc @ 0.5 amp (nominal 24 vdc input)</td>
</tr>
<tr>
<td>Communications</td>
<td>Ethernet or USB, and Serial printer interface</td>
</tr>
</tbody>
</table>

WDL-3 Product Part Number

<table>
<thead>
<tr>
<th>Part Numbers</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A0A0171-ETH</td>
<td>WDL-3 System with Ethernet Communications (Arc Voltage and Current Sensors are Included)</td>
</tr>
<tr>
<td>A0A0171-USB</td>
<td>WDL-3 System with USB Communications (Arc Voltage and Current Sensors are Included)</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Part Numbers</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A5Z0051</td>
<td>Arc Track II™ Software</td>
</tr>
</tbody>
</table>

Note: Specifications subject to change without notice.