Insight ArcAgent™

Premium data acquisition tools that enable both Insight Core™ and Insight Centerpoint™ solutions to integrate with any brand of welding power source.
ArcAgent offers flexible options from basic to advanced in four different models.

Insight ArcAgent features

Welding modes supported: GMAW, GMAW-P, GTAW, FCAW, SMAW, SAW, PAW, ESW, MIAB, CAW. (Not designed for resistance weld monitoring.)

Sensors supported: Measures and monitors four primary welding parameters: amps, volts, wire feed speed, gas flow.


Part Tracking interfaces (Centerpoint™ version only): Required Part Tracking controls via front panel*, digital I/O, EtherNet/IP* or DeviceNet*.

Human-machine interface (HMI) via Insight Centerpoint™: Fully supported by Insight Centerpoint when requirements call for data collection or advanced user interface. Basic setup and functionality does not require Insight Centerpoint software.

Common use cases: Arc-on time and productivity, operator performance, weld parameter verification, eliminate over/under welding, missing and incomplete weld detection*, weld process monitoring and alarming, and governing of weld sequence utilizing Insight Centerpoint*(Part Tracking and WorkFlow™).

*Available on select models.
Typical ArcAgent for Insight Core Installation

Power source
= Arc voltage
Arc current
ArcAgent™ sensors (wire and gas sensors available)
ArcAgent™ for Insight Core™
Insight Core™ on any internet-enabled device with browser

Typical Manual Welding Installation

Power source
= Arc voltage
Arc current
ArcAgent™ sensors (wire and gas sensors available)
ArcAgent™ Manual
Insight Centerpoint™ (optional)

Typical Automation Welding Installation

Power source
= Arc voltage
Arc current
Wire feed speed
Gas flow
ArcAgent™ sensors
ArcAgent™ Auto
Optional programmable logic controller (PLC) or robot controller
Insight Centerpoint™ (optional)
ArcAgent™ for Insight Core™

Standard Features

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Technical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor (external sensors required)</td>
<td>IP21 rated enclosure</td>
</tr>
<tr>
<td>- Arc voltage</td>
<td>- 2.4 GHz and 5 GHz Wi-Fi network connections</td>
</tr>
<tr>
<td>- Arc current</td>
<td>- RJ-45 Ethernet network connection</td>
</tr>
<tr>
<td>- Wire feed speed</td>
<td>- USB port for updates/configuration/operator ID</td>
</tr>
<tr>
<td>- Gas flow</td>
<td></td>
</tr>
</tbody>
</table>

Designed to enable you to see your entire fleet of welders on one productivity dashboard. The ArcAgent for Insight Core uses ArcAgent external sensors allowing any welding power source to be compatible with Insight Core. Your welding productivity data can be viewed securely in any welding browser on any internet connected device.

Product Dimensions (H x W x D)
3.75 x 9.25 x 7 in. (92 x 235 x 178 mm)

Net Weight
2.15 lb (1 kg)

Max. Data Sample Rates
- Volts: 10 Hz
- Amps: 10 Hz
- Wire feed speed: 10 Hz
- Gas flow: 10 Hz
**ArcAgent™ Manual Series** (For use in manual welding applications.)

**ArcAgent Manual with Part Tracking controls**

![ArcAgent Manual with Part Tracking controls](image1)

**ArcAgent Manual with extended capability**

![ArcAgent Manual with extended capability](image2)

**Common side panel**

![Common side panel](image3)

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### Standard Features

#### Hardware
- Monitor (external sensors required)
  - Arc voltage
  - Arc current
  - Wire feed speed
  - Gas flow
  - Total arc time
  - Total wire used
- External interfaces to cell control
- Part Tracking™ control

#### Technical
- Rugged and sealed enclosure
- Front panel user interface
- Two line x 16 character illuminated LCD display
- Security key for authorized setup/reset
- Ethernet PC communication via RJ-45
- Stack light for quick status indication
- Weld and part fault outputs available

#### Software
- Insight Centerpoint™ capabilities (license must be purchased):
  Note: See Insight Centerpoint literature for more detail.

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When used with or without Insight Centerpoint™ software, helps weld operator ensure that a weldment is not missing any welds and that those welds were completed within specification. There are two models of the ArcAgent Manual available.

1. **ArcAgent Manual** with Part Tracking™ controls

   Includes all standard features (above) plus:
   - 5 digital inputs / 3 digital outputs for PLC integration
   - +24 VDC connection for part fixturing control
   - Front panel controls for use with Part Tracking feature: part cycle start/end and ignore weld
   
   Note: Compatible with Insight Centerpoint. See page 6. Does not support AC welding.

2. **ArcAgent Manual** with extended capability

   Includes all standard features (above) plus:
   - USB-PC communication
   - Travel speed/temperature acquisition capability via use of auxiliary sensor module
   - Increased selectable data sampling rates of 1, 3 and 5 kHz (volts and amps)

   Note: Compatible with Insight Centerpoint. See page 6.

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<table>
<thead>
<tr>
<th><strong>Product Dimensions (H x W x D)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>9.5 x 9 x 5 in. (241.2 x 228.6 x 127 mm)</td>
</tr>
</tbody>
</table>

**Net Weight**

11 lb. (5 kg)

**Max. Data Sample Rates**

<table>
<thead>
<tr>
<th><strong>Manual with Part Tracking controls</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Volts: 10 Hz</td>
</tr>
<tr>
<td>Amps: 10 Hz</td>
</tr>
<tr>
<td>Wire feed speed: 10 Hz</td>
</tr>
<tr>
<td>Gas flow: 10 Hz</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Manual with extended capability</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Volts: 5 kHz</td>
</tr>
<tr>
<td>Amps: 5 kHz</td>
</tr>
<tr>
<td>Wire feed speed: 100 Hz</td>
</tr>
<tr>
<td>Gas flow: 100 Hz</td>
</tr>
</tbody>
</table>
### Standard Features

#### Hardware
- Monitor *(external sensors required)*
  - Arc voltage
  - Arc current
  - Wire feed speed
  - Gas flow
  - Total arc time
  - Total wire used
  - External interfaces to cell control
  - Part Tracking™ control
- Total gas used
- Total clamp time
- Average current
- Average wire feed speed
- Deposition
- Deposition rate

#### Technical
- Rugged and sealed enclosure
- Front panel user interface
- Two line x 16 character illuminated LCD display
- Security key for authorized setup/reset
- Ethernet PC communication via RJ-45
- Stack light for quick status indication
- Weld and part fault outputs available

#### Software
- Insight Centerpoint™ capabilities *(license must be purchased)*:
  - Note: See Insight Centerpoint literature for more detail.

 Designed to provide robust, off-the-shelf real-time monitoring of weld count, weld length (duration), process set-point parameters (voltage, current, wire feed, gas flow) total arc time, total wire used, and total clamp time.

Includes all standard features (above) plus:
- 8 digital inputs / 8 digital outputs
- EtherNet/IP communication (32 bytes in/32 bytes out)
- USB-PC communication
- Selectable sampling rates of 1, 3 and 5 kHz (volts and amps)

*Note: Compatible with Insight Centerpoint. See page 6.*

#### Product Dimensions (H x W x D)
9.5 x 9 x 5 in. (241.2 x 228.6 x 127 mm)

#### Net Weight
11 lb. (5 kg)

#### Max. Data Sample Rates
- Volts: 5 kHz
- Amps: 5 kHz
- Wire feed speed: 100 Hz
- Gas flow: 100 Hz
**ArcAgent™ System Configuration Guide**

### 1. What Solution is Needed?

<table>
<thead>
<tr>
<th>Productivity Solution</th>
<th>Manual Welding Solution</th>
<th>Automated Welding Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArcAgent for Insight Core</td>
<td>ArcAgent Manual Series</td>
<td>ArcAgent Auto</td>
</tr>
<tr>
<td>951772 Dinse output</td>
<td>301343 Standard with front panel controls for Part Tracking and Workflow</td>
<td>301346</td>
</tr>
<tr>
<td>951773 Stud output</td>
<td>301345 With extended capability</td>
<td></td>
</tr>
<tr>
<td>Packages include current and voltage sensors with cables, ready to use without ordering additional sensors.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 2. What is Being Monitored?

<table>
<thead>
<tr>
<th>Voltage Monitoring</th>
<th>Current Monitoring</th>
<th>Wire Feed Speed Monitoring</th>
<th>Gas Flow Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage sensing cable used in TIG applications. Requires TIG filter cable (301384) below.</td>
<td>301353 150 A</td>
<td>25 ft. (7.6 m)</td>
<td>301368 25 ft. (7.6 m)</td>
</tr>
<tr>
<td>301351 600 A</td>
<td>301351 600 A</td>
<td>Wire Speed Sensor Cable</td>
<td>Note: For use with argon/CO₂ blends only.</td>
</tr>
<tr>
<td>Accommodates up to 4/0 lugged cables.</td>
<td>301356 1,000 A solid core</td>
<td></td>
<td>Gas Flow Sensor Cable 301369 25 ft. (7.6 m)</td>
</tr>
<tr>
<td>301357 600 A solid core</td>
<td>For cables with Dinse- or Tweco®-style connectors.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>301356 1,000 A solid core</td>
<td>Cables — 25 ft. (7.6 m)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cables — 25 ft. (7.6 m)</td>
<td>301364 Standard current sensor cable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>301365 Voltage sense cable with lugs</td>
<td>301367 Large diameter current sensor cable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>301384 TIG filter cable — requires TIG filter sensor (301359) above</td>
<td></td>
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</tr>
</tbody>
</table>

### 3. Additional Accessories

<table>
<thead>
<tr>
<th>General Accessories</th>
<th>ArcAgent Manual Series Accessories</th>
<th>ArcAgent Auto Accessories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miller Field Application Support 195480</td>
<td>ArcAgent Manual Solenoid Cable 301380 25 ft. (7.6 m)</td>
<td>ArcAgent Auto Digital I/O Cable 301379 25 ft. (7.6 m)</td>
</tr>
<tr>
<td>Contact distributor for details.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 4. What Software is Needed?

- **ArcAgent for Insight Core** only requires a standard web browser, **NO special software needed.**
- **Insight Centerpoint 10**
  
  Select if utilizing ArcAgent Manual Series or ArcAgent Auto. Contact us at insight@millerwelds.com or call 1-844-463-4328.
## Ordering Information

<table>
<thead>
<tr>
<th>Equipment and Options</th>
<th>Stock No.</th>
<th>Description</th>
<th>Qty.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>ArcAgent™ for Insight Core™</td>
<td>951772</td>
<td>Dinse output</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>951773</td>
<td>Stud output</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ArcAgent™ Manual Series</td>
<td>301343</td>
<td>Standard with front panel controls to operate Part Tracking and WorkFlow</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>301345</td>
<td>With extended capability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ArcAgent™ Auto</td>
<td>301346</td>
<td>For automated welding applications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voltage Sensors</td>
<td></td>
<td>See page 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Sensors</td>
<td></td>
<td>See page 6</td>
<td></td>
<td></td>
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<tr>
<td>Wire Speed Sensor</td>
<td>301350</td>
<td>See page 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas Flow Sensor</td>
<td>301358</td>
<td>See page 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cables</td>
<td></td>
<td>See page 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insight Centerpoint™ 10</td>
<td></td>
<td>Contact us at <a href="mailto:insight@millerwelds.com">insight@millerwelds.com</a> or call 1-844-463-4328</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insight Reporter™</td>
<td>300709</td>
<td>Management reporting system client software</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insight Reporter™ SQL Database</td>
<td>300710</td>
<td>Management reporting system database software (one required per server)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miller Field Application Support</td>
<td>195480</td>
<td>Contact distributor for details</td>
<td></td>
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</tr>
</tbody>
</table>

**Date:**

**Total Quoted Price:**

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Distributed by:

[Miller Logo]

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