**Premium Welding Intelligence solutions for any brand of welding power source, designed to integrate with Insight Centerpoint.**

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. Additional digital and analog channels available on select models via Auxiliary Sensor Module.

**Weld fault handling:** Fault notifications via stack light, torch disable, digital I/O, EtherNet/IP®, DeviceNet®. Fault reset via key switch, digital I/O, EtherNet/IP®, DeviceNet® or through Insight Centerpoint (password, RFID or barcode).

**Part Tracking interfaces:** 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, 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 Manual Welding Installation**

- Power Source
- Arc Voltage
- Arc Current
- Ethernet

**Typical Automation Welding Installation**

- Power Source
- Arc Voltage
- Arc Current
- PLC or Robot Controller
- Wire Feed Speed
- Gas Flow
- Ethernet or USB

**ArcAgent™ Standard Features**

**Hardware**
- Monitor *(external sensors required)*:
  - Arc voltage
  - Arc current
  - Wire feed speed
  - Gas flow
  - Total arc time
  - Total wire used
  - Total gas used
  - Total clamp time
  - Average current
  - Average wire feed speed
  - Deposition
  - Deposition rate
- 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

*Not applicable for the ArcAgent Portable model.

**Software**
- Insight Centerpoint™ capabilities *(seat/site license must be purchased)*:
  - Part Tracking™
  - WorkFlow™
  - Weld production process monitoring
  - Weld Signature® analysis
  - Weld Confidence™
  - Insight Reporter™
  - PC-based human-machine interface (HMI)

*Note: See Insight Centerpoint literature for more detail.*
ArcAgent™ Manual Series (For use in manual welding applications.)

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 three models of the ArcAgent Manual available.

1. ArcAgent Manual
Includes all standard features (page 2) plus:
- 5 digital inputs / 3 digital outputs for PLC integration

Note. Does not support AC welding.

2. ArcAgent Manual with Part Tracking™ Controls
Includes all standard features (page 2) 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. Does not support AC welding.

3. ArcAgent Manual with Insight Torch Capability
Includes all standard features (page 2) 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)

Available Options/Accessories

Insight Remote Part Tracking Control (RPTC)
Allows welding operators to interact with Part Tracking™ without the use of PC inputs.

Insight Centerpoint™
ArcAgent Manual with Insight Torch Capability model only

Auxiliary Sensor Module
Enables the use of dual travel speed sensors as well as two analog inputs for other sensors such as temperature. (Input levels supported include 4–20 mA, 0–5 V, 0–10 V.)

Travel Speed Encoder
Allows Insight Centerpoint to capture travel speed in a fixed automation application. Requires auxiliary sensor module (above) and a travel speed wheel (below).

Travel Speed Wheels
Available in 6-inch (152.4 mm) and 12-inch (304.8 mm) wheels.

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
Manual/Manual with Part Tracking Controls
Volts: 10 Hz
Amps: 10 Hz
Wire feed speed: 10 Hz
Gas flow: 10 Hz

Manual with Insight Torch Capability
Volts: 5 kHz
Amps: 5 kHz
Wire feed speed: 100 Hz
Gas flow: 100 Hz
ArcAgent™ Auto  
(For use in automated welding applications.)

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 (page 2) 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)
- Travel speed acquisition capability via use of auxiliary sensor module

Available Options/Accessories

**Insight Remote Part Tracking Control (RPTC)**
Allows welding operator to interact with Part Tracking™ without the use of PC inputs.

**Insight Centerpoint™**

**Auxiliary Sensor Module**
Enables the use of dual travel speed sensors as well as two analog inputs for other sensors (4–20 mA, 0–5 V, 0–10 V).

**Travel Speed Encoder**
Allows Insight Centerpoint to capture travel speed in a fixed automation application. Requires auxiliary sensor module (above) and a travel speed wheel (below).

**Travel Speed Wheels**
Available in 6-inch (152.4 mm) and 12-inch (304.8 mm) wheels.

| 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             |
The ideal tool for the welding professional. High Fidelity Weld Signature® capture with calculation of peak and background amperages/voltages, pulse width, pulse frequency and shorting frequency. Heat input and deposition acquisition available with additional sensors.

Includes all standard features (page 2) plus:

■ Travel speed acquisition capability via use of auxiliary sensor module
■ Selectable sampling rates of 1, 3, 5 and 10 kHz (volts and amps)

Must select device based on method of computer connection:

■ USB (recommended) — choose if IT department restricts PC network settings
■ Ethernet-RJ45 — choose if PC network settings are not restricted

Available Options/Accessories

Insight Centerpoint™

Auxiliary Sensor Module
Enables the use of dual travel speed sensors as well as two analog inputs for other sensors (4–20 mA, 0–5 V, 0–10 V).

Travel Speed Encoder
Allows Insight Centerpoint to capture travel speed in a fixed automation application. Requires auxiliary sensor module (above) and a travel speed wheel (below).

Travel Speed Wheels
Available in 6-inch (152.4 mm) and 12-inch (304.8 mm) wheels.

External Serial Interface Options (32 bytes in/32 bytes out)
- DeviceNet communication
- EtherNet/IP communication

ArcTimer™

For use in any setting to monitor very basic weld data (displayed on LCD): total arc time, last weld time, current weld time and total arc count.

■ Battery operated (4 C-size batteries)
■ Keyed reset
Includes required current switch.

Note: Not compatible with Insight Centerpoint.
1. What Solution is Needed?

**Manual Welding Solution**
- ArcAgent Manual Series
  - 301342 Standard
  - 301343 Standard w/front panel controls for Part Tracking and Workflow
- 301345 With Insight torch capability

**Automated Welding Solution**
- ArcAgent Auto 301346

2. What is Being Monitored?

**Voltage Monitoring**
- TIG Filter Sensor 301359
  Voltage sensing cable used in TIG applications. Requires TIG filter cable (301384) below.
- Cables — 25 ft. (7.6 m)
  - 301365 Voltage sense cable with lugs
  - 301366 Voltage sense quick disconnect cable
  - 301384 TIG filter cable — requires TIG filter sensor (301359) above
- 301385 Voltage sense cable with alligator clips

**Current Monitoring**
- Standard Current Sensors
  - 301353 150 A
  - 301351 600 A
  - 301352 1,000 A
  Accommodates up to 4/0 lugged cables.
- Large Diameter Current Sensors
  - 301355 600 A split core
  - 301357 600 A solid core
  - 301354 1,000 A split core
  - 301356 1,000 A solid core
  For cables with Dinse- or Tweco®-style connectors.
- Cables — 25 ft. (7.6 m)
  - 301364 Standard current sensor cable
  - 301367 Large diameter current sensor cable

3. Additional Accessories

**General Accessories**
- Extension Cables — 25 ft. (7.6 m)
  - 301370 Voltage extension cable
  - 301371 Wire speed extension cable
  - 301372 Current/gas/auxiliary extension cable
  - 301375 RPTC cable
- Field Application Support 195480
  Miller field support (contact distributor for details).

**ArcAgent Manual Series Accessories**
- Insight Remote Part Tracking Control (RPTC) 301373
  Interact with Part Tracking with point-of-use control.
- Auxiliary Sensor Module (24 VDC) 301374
  Allows for use of travel speed sensors as well as two analog inputs (such as temperature).
- ArcAgent Manual Solenoid Cable 301380 25 ft. (7.6 m)

4. What Software is Needed?

**Insight Centerpoint**
- 301255 Version 9.0 single license
- 301256 Version 9.0 site license
  Select one if utilizing with ArcAgent Manual Series, Auto or Portable.

**Insight Reporter** 300709
Management reporting system client software.

**Insight Reporter SQL Database** 300710
Management reporting system database software (one required per server).
### ArcAgent™ System Configuration Guide

#### Weld Process Engineering Solution

- **ArcAgent Portable**
  - 301347 Ethernet PC interface
  - 301348 USB PC interface

#### Productivity Solution

- **ArcTimer™ 301349**
  - Arc time and weld count totalizer. Includes current switch. No other accessories needed. All-in-one device!

### Wire Feed Speed Monitoring

- **Wire Speed Sensor**
  - 301350

- **Wire Speed Sensor Cable**
  - 301368 25 ft. (7.6 m)

### Gas Flow Monitoring

- **Gas Flow Sensor**
  - 301358

- **Gas Flow Sensor Cable**
  - 301369 25 ft. (7.6 m)

### Travel Speed Monitoring (NOT compatible with ArcAgent Manual and ArcAgent Manual with Part Tracking Controls)

- **Travel Speed Encoder**
  - 301362
  - Requires auxiliary sensor module (see accessories for ArcAgent Manual with Insight Torch Capability, ArcAgent Auto or ArcAgent Portable) and a travel speed wheel (below).

- **Travel Speed Encoder Mounting Bracket**
  - 301363

- **Travel Speed Wheel**
  - 301360 6 inch (152.4 mm)
  - 301361 12 inch (304.8 mm)

- **Travel Speed Encoder Cable**
  - 301376 25 ft. (7.6 m)

### ArcAgent Auto Accessories

- **Insight Remote Part Tracking Control (RPTC)**
  - 301373
  - Interact with Part Tracking with point-of-use control.

- **Auxiliary Sensor Module (24 VDC)**
  - 301374
  - Allows for use of travel speed sensors as well as two analog inputs (such as temperature).

- **ArcAgent Auto Digital I/O Cable**
  - 301379 25 ft. (7.6 m)

### ArcAgent Portable Accessories

- **Auxiliary Sensor Module (24 VDC)**
  - 301374
  - Allows for use of travel speed sensors as well as two analog inputs.

- **External Serial Interface**
  - 301378 DeviceNet serial module
  - 301377 EtherNet/IP serial module (24 VDC)
## 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><strong>ArcAgent™ Manual Series</strong></td>
<td>301342</td>
<td>Standard</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>301343</td>
<td>Standard with front panel controls to operate Part Tracking and WorkFlow</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>301345</td>
<td>With Insight torch capability</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ArcAgent™ Auto</strong></td>
<td>301346</td>
<td>For automated welding applications</td>
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<tr>
<td><strong>ArcAgent™ Portable</strong></td>
<td>301347</td>
<td>Ethernet PC interface</td>
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<tr>
<td></td>
<td>301348</td>
<td>USB PC interface</td>
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<tr>
<td><strong>ArcTimer™</strong></td>
<td>301349</td>
<td>Arc time and weld count totalizer, includes current switch</td>
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<tr>
<td><strong>Sensors</strong></td>
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<tr>
<td>Voltage Sensors</td>
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<tr>
<td>Current Sensors</td>
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<td><strong>Wire Speed Sensor</strong></td>
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<td><strong>Gas Flow Sensor</strong></td>
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<td>See page 7</td>
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<tr>
<td><strong>Travel Speed Encoder</strong></td>
<td>301362</td>
<td>Requires travel speed wheel and auxiliary sensor module</td>
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<td><strong>Travel Speed Encoder Mounting Bracket</strong></td>
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<td><strong>Travel Speed Wheel</strong></td>
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<td></td>
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<td><strong>Peripherals</strong></td>
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<td>Insight Remote Part Tracking Control (RPTC)</td>
<td>301373</td>
<td>Compatible with the ArcAgent Manual Series and ArcAgent Auto only</td>
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<td>Auxiliary Sensor Module</td>
<td>301374</td>
<td>Compatible with ArcAgent Manual with Insight Torch Capability, Auto and Portable only</td>
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<td><strong>External Serial Interface</strong></td>
<td>301378</td>
<td>DeviceNet serial module</td>
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<td>EtherNet/IP serial module</td>
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<tr>
<td>Extension Cables</td>
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<tr>
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<td>301256</td>
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<td>Insight Reporter™</td>
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<td>Management reporting system client software</td>
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<tr>
<td>Field Application Support</td>
<td>195480</td>
<td>Miller field support (contact distributor for details)</td>
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</tbody>
</table>

**Date:**

**Total Quoted Price:**

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**Distributed by:**