Insight ArcAgent

Premium data acquisition tools that enable **Insight Centerpoint™ solutions to integrate with** any brand of welding power source.



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.

Weld fault handling (Centerpoint™ version only): 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, 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.



An ITW Welding Company 1635 West Spencer Street P.O. Box 1079 Appleton, WI 54912-1079 USA

Equipment Sales US and Canada

Phone: 866-931-9730 FAX: 800-637-2315

International Phone: 920-735-4554 International FAX: 920-735-4125

MillerWelds.com









ArcAgent™ Manual (For use in manual welding applications.)









Standard Features

Hardware

- Monitor (external sensors required)
 - Arc voltage
- Total gas used
- Arc current
- Total clamp time
- Wire feed speed
- Average current
- Gas flow
- Average wire feed speed
- Total arc time
- DepositionDeposition rate
- Total wire used DepositiExternal 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 MillerWelds.com/insight for more information.

When used with or without Insight Centerpoint $^{\text{\tiny M}}$ software, helps weld operator ensure that a weldment is not missing any welds and that those welds were completed within specification.

Includes all standard features (above) plus:

- 8 digital inputs / 8 digital outputs
- USB-PC communication
- Selectable sampling rates of 1, 3 and 5 kHz (volts and amps)

Max. Data Sample Rates

Volts: 5 kHz Amps: 5 kHz

Wire feed speed: 100 Hz Gas flow: 100 Hz

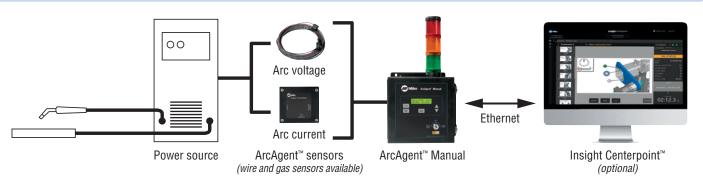
Product Dimensions (H x W x D)

9.5 x 9 x 5 in. (241.2 x 228.6 x 127 mm)

Net Weight

11 lb. (5 kg)

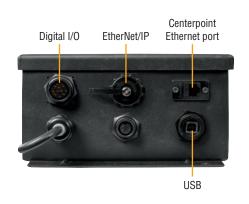
Typical Manual Welding Installation

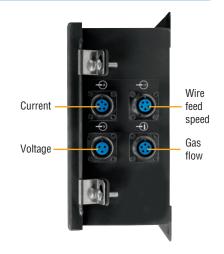




ArcAgent Auto (For use in automated welding applications.)







Standard Features

Hardware

- Monitor (external sensors required)
 - Arc voltage
- Total gas used
- Arc current
- Total clamp time
- Wire feed speed
- Average current
- wire feed speed
- Average wire feed speed
- Total arc time
- Deposition
- Total wire used
- 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 indicationWeld and part fault outputs available

Software

Insight Centerpoint™ capabilities (license must be purchased):

Note: See MillerWelds.com/insight for more information.

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.

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)

Max. Data Sample Rates

Volts: 5 kHz Amps: 5 kHz

Wire feed speed: 100 Hz Gas flow: 100 Hz

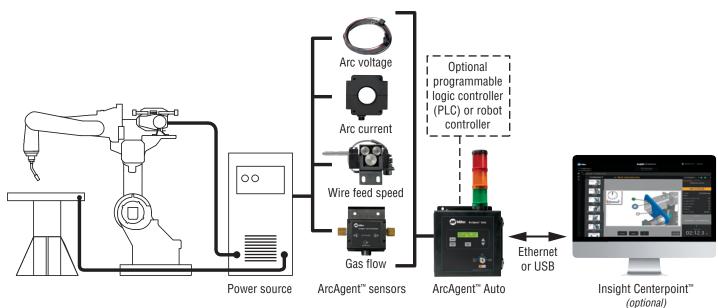
Product Dimensions (H x W x D)

9.5 x 9 x 5 in. (241.2 x 228.6 x 127 mm)

Net Weight

11 lb. (5 kg)

Typical Automation Welding Installation





ArcAgent™ System Configuration Guide

1. What Solution is Needed?

Manual Welding Solution

ArcAgent Manual 301345



Automated Welding Solution

ArcAgent Auto 301346

2. What is Being Monitored?





TIG Filter Sensor 301359

Voltage sensing cable used in TIG applications. Requires TIG filter cable (301384) below.

Cables — 25 ft. (7.6 m)

301516 Voltage sense cable with Dinse

301365 Voltage sense cable with lugs

301384 TIG filter cable — requires TIG filter sensor (301359)

above

Current Monitoring

Standard Current Sensor 301351 600 A



Accommodates up to 4/0 lugged cables or a single Dinse/Tweco® cable.

Large Diameter Current Sensor 301356

1,000 A solid core
For multiple large cables in high-amperage applications.

Cables — 25 ft. (7.6 m)

301364 Standard current sensor cable

301367 Large diameter current sensor cable

Wire Feed Speed Monitoring



Wire Speed Sensor 30135

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

Gas Flow Monitoring



Gas Flow Sensor 301358 *Note: For use with argon/CO₂ blends only.*

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

3. Additional Accessories

Miller Field Application Support 195480

Contact distributor for details.

ArcAgent Auto Digital I/O Cable 301379 25 ft. (7.6 m). For ArcAgent Auto only.

4. What Software is Needed?

Insight Centerpoint 10 Select if utilizing ArcAgent Manual or ArcAgent Auto. Contact us at insight@millerwelds.com or call 1-844-463-4328.

Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
ArcAgent™ Manual	301345	For manual welding applications. Sensors and cables required (see above)		
ArcAgent™ Auto	301346	For automated welding applications. Sensors and cables required (see above)		
Sensors				
Voltage Sensors		See above		
Current Sensors		See above		
Wire Speed Sensor	301350	See above		
Gas Flow Sensor	301358	See above		
Cables		See above		
Software				
Insight Centerpoint™ 10		Contact us at insight@millerwelds.com or call 1-844-463-4328		
Miller Field Application Support	195480	Contact distributor for details		

Date: Total Quoted Price:

Distributed by:

