# IntelliSense® Catalog



Predictive Intelligence for Pneumatics



Introducing IntelliSense®, a one-of-a-kind technology platform combining sensors, cylinders, and software to deliver real-time performance data for standard pneumatic devices. With IntelliSense®, users can utilize condition-based monitoring to be proactive about maintenance and achieve system optimization to maximize uptime in the age of full tilt manufacturing.

#### **Real-Time Insights for Real Results**

With a constant influx of precise and accurate performance-related data, users can make smarter decisions to ensure maximum uptime and component performance.

#### **Predictive Prognostics**

Up-to-date condition information allows IntelliSense® to predict when a cylinder will fail — increasing uptime.

#### **Remote Monitoring**

Using a network of smart devices, users can collect data and monitor machinery remotely, even from multiple locations.

#### **Machine Efficiency**

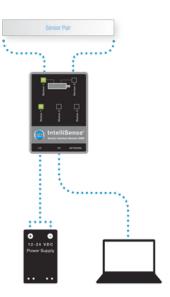
The availability of real-time data gives users the ability to identify whether a component is achieving its desired performance specification. This is especially important in sequencing applications that rely on precise stroke rates.

#### **Maximizing Production**

For customers running machinery 24/7 or producing large value batches, IntelliSense® can alert users to under-performing components - enabling proactive responses for maximum uptime.

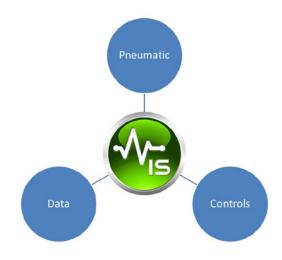
#### **How it Works**

- The "intelligence" lies within the IntelliSense® Sensor Interface Module (SIM).
   This remote monitoring device gives users operational insights at the device level.
- The IntelliSense® SIM can be easily connected to Bimba cylinders using pneumatic fittings.
- Using a sensor pair, IntelliSense® is able to report a range of data, including cylinder condition, stroke time, end of travel, pressure and temperature.
- Data and insights can be sent from the IntelliSense® SIM to a PLC for advance alarming and controls while also sending real-time information to a PC or IntelliSense® Data Gateway, which enables remote monitoring and data logging for user analysis.
- The machine-to-machine technologies allow for close monitoring of individual components, giving users the insight needed to move from emergency repair to proactive upgrades—optimizing production as a whole.



# **IntelliSense® Networks**

IntelliSense® brings three typically disparate sub-systems: Pneumatic, Data, and Controls, together to enable you to optimize your systems performance.



The power of the IntelliSense® platform is its flexibility and scalability. From monitoring a single cylinder using the integrated status lights to monitoring dozens of cylinders on the other side of the world with the IntelliSense® Data Gateway, the IntelliSense® platform can be configured to meet your needs. Several sample network architectures are provided on page 18, 19, and 20 of this catalog.

#### **Pneumatic**

The IntelliSense® system is designed to be easily installed in any application. The IntelliSense® sensors come preassembled to a push to connect fitting available in eight different sizes, both English and metric. The sensors have a stainless steel housing and are IP69K rated allowing them to be located in tough environments near the application.





#### **Data**

Each IntelliSense® Data Gateway allows you to store detailed performance data from up to 12 SIMs simultaneously. When connected to the internet, the Gateway allows remote access to the real time data from the attached SIMs.

#### **Controls**

The power of data is being able to use it. The IntelliSense® SIM can be connected to a PLC using MODBUS RTU on a RS485 network. The SIM provides read only access of cylinder performance data and alerts status over MODBUS RTU to the PLC. This data can be used to modify the performance of the machine to improve efficiency or alert an operator of an impending failure.



# **IntelliSense® Software Features**

#### **Cylinder Status**

The IntelliSense® software can be installed on a PC for local monitoring of the IntelliSense® Sensor Interface Module (SIM) providing access to the current cylinder status, including cycle time, cycle count, estimated cycles remaining, estimated days of life remaining and estimated percentage of cylinder life remaining. The addition of an IntelliSense® Data Gateway and an internet connection gives access to the status of multiple SIMs at the same time from anywhere in the world.



#### IntelliSense® Cylinder Status

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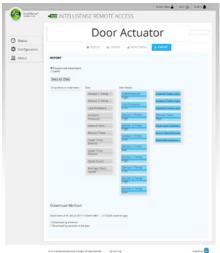
#### **Pressure and Temperature Monitoring**

The IntelliSense® software monitoring windows stream pressure data from both sensors every millisecond and temperature data every second providing a deeper understanding of how the system is performing and guiding enhancements to the efficiency of your machine by optimizing air usage.

#### IntelliSense® Data Gateways Data Logging

IntelliSense® Data Gateway offers an enhanced user interface that includes data logging and export. With over 100 GB of available storage, the IntelliSense® Data Gateway stores 30 different variables including Pressure, Temperature, Extend Time, Retract Time. Many of these variables can indicate product quality. The data logged can provide an additional data point ensuring a batch of product was manufactured correctly.

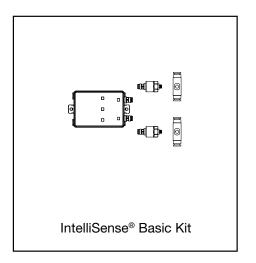
#### Pressure and Temperature Monitoring



IntelliSense® Data Gateway Data Export

### **IntelliSense® Kits**

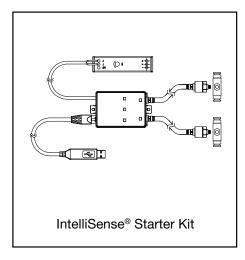
IntelliSense® hardware is available in kits or as individual components. The kits are the most cost effective way to get started with IntelliSense®.



The IntelliSense® Basic Kit contains just the basic hardware and software. It is designed for customers that want to provide their own cabling and power.

#### **Contents:**

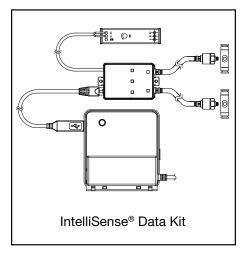
- 1 IntelliSense® Sensor Interface Module (SIM)
- 2 IntelliSense® Pressure/Temperature Sensor
- 2 IntelliSense® Fittings
- 1 USB Drive with Software



The IntelliSense® Starter Kit contains everything you need to get started using IntelliSense®. This kit is perfect for bench testing and product development.

#### **Contents:**

- 1 IntelliSense® Sensor Interface Module (SIM)
- 2 IntelliSense® Pressure/Temperature Sensor
- 2 IntelliSense® Fittings
- 2 IntelliSense® 2.0 Meter Sensor Cable
- 1 IntelliSense® 0.5 Meter IO Cable
- 1 IntelliSense® USB Programming Cable
- 1 24V Power Supply
- 1 USB Drive with Software



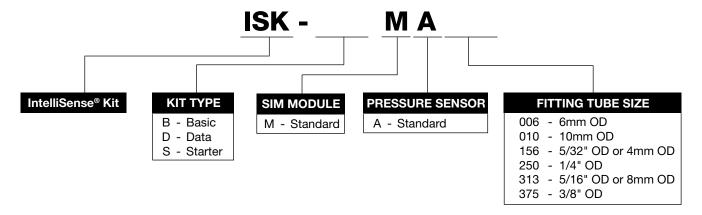
The IntelliSense® Data Starter Kit contains everything you need to take IntelliSense® to the next level and add remote monitoring and data logging.

#### **Contents:**

- 1 IntelliSense® Sensor Interface Module (SIM)
- 2 IntelliSense® Pressure/Temperature Sensor
- 2 IntelliSense® Fittings
- 2 IntelliSense® 2.0 Meter Sensor Cable
- 1 IntelliSense® 0.5 Meter IO Cable
- 1 IntelliSense® USB Programming Cable
- 1 IntelliSense® Data Gateway
- 1 24V Power Supply
- 1 USB Drive with Software

### **How to Order**

The IntelliSense® Kit part number consists of five alphanumeric clusters. The clusters allow the kit to be configured to match your requirements by selecting the kit type and the tee fitting size. Only one style of SIM module and pressure sensor is available, therefore they are "fixed" in the part number as shown below.



# **IntelliSense® Kit Types**

IntelliSense® Basic Kit		
1	IntelliSense® Sensor Interface Module (SIM)	
2	IntelliSense® Pressure/Temperature Sensor	
2	IntelliSense® Fittings	

	IntelliSense <sup>®</sup> Starter Kit		
1	IntelliSense® Sensor Interface Module (SIM)		
2	IntelliSense® Pressure/Temperature Sensor		
2	IntelliSense® Fittings		
2	IntelliSense® 2.0 Meter Sensor Cable		
1	IntelliSense® 0.5 Meter IO Cable		
1	IntelliSense® USB Programming Cable		
1	24V Power Supply		

1 IntelliSense® Sensor Interface Module (SIM) 2 IntelliSense® Pressure/Temperature Sensor 2 IntelliSense® Fittings 2 IntelliSense® 2.0 Meter Sensor Cable 1 IntelliSense® 0.5 Meter IO Cable 1 IntelliSense® USB Programming Cable 1 IntelliSense® Data Gateway 1 24V Power Supply	IntelliSense® Data Starter Kit		
2 IntelliSense® Fittings 2 IntelliSense® 2.0 Meter Sensor Cable 1 IntelliSense® 0.5 Meter IO Cable 1 IntelliSense® USB Programming Cable 1 IntelliSense® Data Gateway	1	IntelliSense® Sensor Interface Module (SIM)	
2 IntelliSense® 2.0 Meter Sensor Cable 1 IntelliSense® 0.5 Meter IO Cable 1 IntelliSense® USB Programming Cable 1 IntelliSense® Data Gateway	2	IntelliSense® Pressure/Temperature Sensor	
<ol> <li>IntelliSense® 0.5 Meter IO Cable</li> <li>IntelliSense® USB Programming Cable</li> <li>IntelliSense® Data Gateway</li> </ol>	2	IntelliSense® Fittings	
IntelliSense® USB Programming Cable     IntelliSense® Data Gateway	2	IntelliSense® 2.0 Meter Sensor Cable	
1 IntelliSense® Data Gateway	1	IntelliSense® 0.5 Meter IO Cable	
- Internet Data date ray	1	IntelliSense® USB Programming Cable	
1 24V Power Supply	1	IntelliSense® Data Gateway	
	1	24V Power Supply	

Accessories	
IntelliSense® Data Gateway	ISG-01
IntelliSense® Junction Block	ISH-R04
IntelliSense® 2.0 Meter Sensor Cable	CBL-IS-M8-2
IntelliSense® 5.0 Meter Sensor Cable	CBL-IS-M8-5
IntelliSense® 0.5 Meter IO Cable	CBL-IS-CF-0.5
IntelliSense® 1.8 Meter USB Programming Cable	CBL-IS-RU-1.8
IntelliSense® 2.0 Meter DB9 to RJ45 Serial Cable	CBL-IS-RD-2
IntelliSense® 0.5 Meter DB9 to RJ45 Serial Cable	CBL-IS-RD-0.5
RS422 to USB HUB	ISH-D04
24V Power Supply	PWR-020A24-DIN

Service Parts	
IntelliSense® Pressure/Temperature Sensor	ISS-1A-7SS
IntelliSense® Sensor Interface Module (SIM)	ISM-S1-BA1-5P
IntelliSense® Fitting, 6mm OD Tubing	ISF-T1-006
IntelliSense® Fitting, 10mm OD Tubing	ISF-T1-010
IntelliSense® Fitting, 5/32" OD or 4mm OD Tubing	ISF-T1-156
IntelliSense® Fitting, 1/4" OD Tubing	ISF-T1-250
IntelliSense® Fitting, 5/16" OD or 8mm OD Tubing	ISF-T1-313
IntelliSense® Fitting, 3/8" OD Tubing	ISF-T1-375
IntelliSense® Data Gateway DIN Rail Bracket	ISG-BRKT

# **IntelliSense® Kits**

# **Specifications**

Pressure Rating		
IntelliSense® Pressure/Temperature Sensor:		
Operating Pressure Range	0 psia to 200 psia [0 bar(a) to 14 bar(a)]	
Overpressure Rating	2X Maximum Operating Pressure	
Burst Pressure	5X Maximum Operating Pressure	
IntelliSense® Fitting:		
Operating Pressure Range	14.7 psia to 164.7 psia [1 bar(a) to 11.4 bar(a)]	
Overpressure Minimum Rating	264.7 psia [18.3 bar(a)]	

Operating Temperature Range		
IntelliSense® SIM	32° F [0° C] to 131° F [55° C]	
IntelliSense® Pressure/ Temperature Sensor	-40° F [-40° C] to 176° F [80° C]	
IntelliSense® Fitting	32° F [0° C] to 140° F [60° C]	
IntelliSense® Data Gateway	32° F [0° C] to 131° F [55° C]	
IntelliSense® Programming Cable	-40° F [-40° C] to 185° F [85° C]	
IntelliSense® Sensor Cable	-4° F [-20° C] to 176° F [80° C]	
IntelliSense® I/O Cable	-4° F [-20° C] to 176° F [80° C]	
24V Power Supply	-4° F [-20° C] to 158° F [70° C]	

Materials		
IntelliSense® SIM:		
Housing	ABS Plastic	
Back Plate	Mild Steel	
IntelliSense® Pressure/Temperat	ure Sensor:	
Housing	302 Stainless Steel	
Port	303 Stainless Steel	
Sensor Isolation Barrier Retaining Ring	304 Stainless Steel	
Sensor Isolation Barrier	Silicone Gel	
O-Ring Seal	Buna-N	
IntelliSense® Fitting:		
Body	Nickel Plated Brass	
Seals	Buna-N	
IntelliSense® Data Gateway:		
Housing	Plastic and Aluminum	

Ingress Protection Rating		
IntelliSense® SIM	IP50	
IntelliSense® Pressure/ Temperature Sensor	IP69K	

# **IntelliSense® Kits**

### **Service Parts**

Components included in the IntelliSense® Kits can also be ordered as individual items to meet your service needs or adapt and existing IntelliSense® installation to a new application.

Item	Part Number	Description	Image
IntelliSense® Sensor Interface Module (SIM)	ISM-S1-BA1-5P	The intelligence behind IntelliSense® - Five LEDs indicate the status of the item being monitored - RJ45 connector for Modbus RTU communication - RJ45 connector for Serial RS422 communication - Two Male four pin micro M8 connectors for sensor communication - IP50 Rated	IntelliSense and Trans
IntelliSense® Pressure/Temperature Sensor	ISS-1A-7SS	Combination pressure and temperature sensor - Proprietary communication protocol for use with an IntelliSense® SIM - 10-32 thread SS pressure port - IP69K rated when used with appropriate cables	
IntelliSense® Fitting	ISF-T1-006 ISF-T1-010 ISF-T1-156 ISF-T1-250 ISF-T1-313 ISF-T1-375	In-line push to connect fitting - For use with PE, PA, and 95-D Polyurethane tubing - Metric and English sizes 4mm, 6mm, 8mm, 10mm, 5/32", 1/4", 5/16", 3/8" - #10-32 thread port - Nickel plated brass - Buna-N seals	
IntelliSense® Data Gateway DIN Rail Bracket	ISG-BRKT	Replacement DIN Rail mounting steel bracket for an IntelliSense® Data Gateway.	

# **IntelliSense® Sensor Interface Module (SIM)**

## **Service Parts**

# **Specifications**

Connectors		
Sensor	2 - Male 4 Pin M8	
Ю	1 - 4 Pin Molex SL™ Modular Connector	
PC	1 - RJ-45/RS-422 Serial	
Modbus	1 - RJ-45/RS-485 - Modbus RTU	

Installation	
	35mm DIN Rail using Brackets Flush mounted using Screw Hole

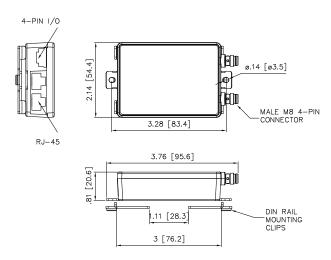
Materials	
Housing	ABS
Back Plate	18-Gauge Mild Steel, Black Electro-Coat
DIN Rail Brackets	18-Gauge Mild Steel, Black Electro-Coat

Software Requirements	
PC with an available USB Port	
Windows 8 (32-/64-bit)/7 (32-/64-bit)/Vista (32-/64-bit), XP (32-/64-bit)/Server 2003 and 2008 (32-/64-bit)/Server 2008 R2	

Electrical and EMS Specifications	
Input Voltage	11 to 24VDC Regulated
Current Draw (SIM and 2 Sensors)	<100mA @12V DC
EMC Rating	Emissions and immunity to EN 61326:2013
Electro Static Discharge	4 kV Contact, 8 kV Air, 4 kV Indirect
Radiated Immunity	10 V/m from 80 - 1000 MHz, 3 V/m from 1.4 to 2.0 GHz and 3 V/m from 2.0 to 2.7 GHz Amplitude modulated with a 1 kHz sine wave to a depth of 80%.)
Fast Transient Burst	±0.5 KV on all ports (±1kV on AC Power)
Immunity to Conducted Disturbances	3V rms 0.15-80 MHz, 80% AM Modulation @ 1 kHz

Environmental	
IP Rating	IP50
Operating Temperature	-32° F [0° C] to 131° F [55° C]
Vibration	5G @ 15Hz-500Hz-1hr - Random @ 0° & 55° C (Operating)
Shock	30G 10,000 times each axis and direction

Certifications	
UL EN61326-1 (Industrial), UL EN61000-3-2, UL EN61000-3-3	
CE	



# **IntelliSense® Pressure/Temperature Sensor**

# **Service Parts**

# **Specifications**

Pressure Sensing Performance Specification	
Operating Pressure	0 psia to 200 psia [0 bar(a) to 14 bar(a)]
Overpressure Rating	2X maximum operating pressure
Burst Pressure	5X maximum operating pressure
Resolution	0.01 psi [0.001 bar]
Accuracy (0 psi [0 bar] to 87 psi [6 bar]) -32° F [0° C] to 104° F [40° C] -40° F [-40° C] to 185° F [85° C]	±0.29 psi [±20 mbar] ±0.58 psi [±40 mbar]
Response Time	1 ms
Long Term Stability	-0.29 psi/year [-20 mbar/year]

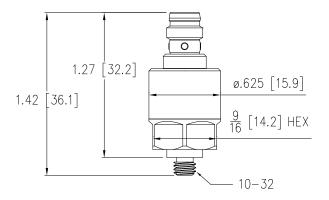
Temperature Sensing Performance Specification	
Temperature Range	-9° F [-15° C] to 127° F [60° C]
Resolution	<0.02° F [0.01° C]
Accuracy	±18° F [10° C]

Installation	
Thread Size	10-32
Maximum Torque	in-lb [1.12 Nm]
Orientation	Mount with Pressure Port Pointing Down
Air Quality	Class 3 ISO-8573-1/5 micron- filter
Fluid	Compatible with 303 and 304 Stainless Steel, Buna-N, and Silicone Gel

IntelliSense® Pressure/Temperature Sensor	
Housing	302 Stainless Steel
Port	303 Stainless Steel
Sensor Isolation Barrier Retaining Ring	304 Stainless Steel
Sensor Isolation Barrier	Silicone Gel
O-Ring Seal	Buna-N

Environmental Specifications	
IP Rating	Up to IP69K based on cables used
Operating Temperature Range	-40° F [-40° C] to 176° F [80° C]
Vibration	18-20G @ 80-2000Hz - 1hr - Random
Shock	30G 10,000 times each axis and direction

Electrical and EMS Specifications	
Power	Supplied by SIM via Sensor Cable
EMC Rating	Emissions and Immunity to EN 61326:2013
Electro Static Discharge	4 kV Contact, 8 kV Air, 4 kV Indirect
Radiated Immunity	10 V/m from 80 - 1000 MHz, 3 V/m from 1.4 to 2.7 GHz Amplitude modulated with a 1 kHz sine wave to a depth of 80%
Fast Transient Burst	±0.5 KV
Immunity to Conducted Disturbances	3V rms 0.15-80 MHz, 80% AM Modulation @ 1 kHz



# **IntelliSense® Fitting**

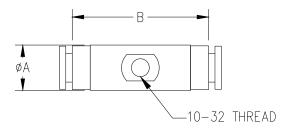
# **Service Parts**

# **Specifications**

Materials	
Body	Nickel Plated Brass
Collet	Stainless Steel
O-Ring Seal	Buna-N

	Recommended Tubing
Nylon PF	
95-D Polyurethane	

Environmental Specifications		
Operating Temperature Range	32° F [0° C] to 140° F [60° C]	
Operating Pressure Range	14.7 psia to 164.7 psia [1 bar(a) to 11.4 bar(a)]	
Overpressure Minimum Rating	264.7 psia [18.3 bar(a)]	



Part Number	Tube Size	Dim A	Dim B
ISF-T1-006	6mm	1.42 [36.07]	0.47 [11.94]
ISF-T1-010	10mm	1.62 [41.15]	0.63 [16.00]
ISF-T1-156	5/32" or 4mm	1.26 [32.00]	0.47 [11.94]
ISF-T1-250	1/4"	1.42 [36.07]	0.47 [11.94]
ISF-T1-313	5/16" or 8mm	1.54 [39.12]	0.55 [13.97]
ISF-T1-375	3/8"	1.62 [41.15]	0.63 [16.00]

# **IntelliSense® Kits**

### **Accessories**

The IntelliSense® family of products includes many accessories that can be used to enhance the functionality of the IntelliSense® Kits. These accessories allow you to customize the IntelliSense® installation to meet your needs.

Item	Part Number	Description	Image
IntelliSense® Data Gateway	ISG-01	Remote monitoring for up to 12 SIMs - Ethernet and wireless connectivity - Data logging capabilities with 100+ GB of storage - Includes IntelliSense® Data Gateway DIN rail bracket	intelliSense
IntelliSense® Junction Block	ISH-R04	Modbus and power Junction Block - Four RJ45 Connections - One terminal block - Power injector for multiple SIM - Networking aid for Modbus - DIN Rail mountable	SMI SM2  SMY  SMY  SMY  SMY  SMY  SMY  SMY
IntelliSense® Sensor Cable	CBL-IS-M8-2 CBL-IS-M8-5	Sensor Cable - 2.0 meter or 5.0 meter length - 90 degree four pin female Micro M8 Connector - Straight four pin female Micro M8 Connector - Connect SIM to Sensor - 2.0 meter cables included with Starter Kit and Data Starter Kit - IP67 rated	
IntelliSense® 0.5 Meter IO Cable	CBL-IS-CF-0.5	IO Cable - 0.5 meter length - Molex 50-57-9404 4 Pin Connector - Flying lead - Supply end of travel outputs to PLC or supply power to SIM - Included with Starter Kit and Data Starter Kit	
IntelliSense® 1.8 Meter USB Programming Cable	CBL-IS-RU-1.8	USB to RJ45 RS422 Serial Cable - Required to configure SIM - 1.8 meter length - Connect SIM to PC or IntelliSense® Data Gateway - Included with Starter Kit and Data Starter Kit	

# **IntelliSense® Kits**

# **Accessories**

Item	Part Number	Description	Image
IntelliSense® DB9 to RJ45 Serial Cable	CBL-IS-RD-0.5 CBL-IS-RD-2	DB9 to RJ45 Serial Cable - 0.5 meter or 2.0 meter length - Connect SIM to RS422 to USB HUB	
RS422 to USB HUB	ISH-D04	4-Port USB to RS-422/485 Serial Adapter - Serial communication speeds up to 1Mbps - RS-422 and RS-485 auto detect and switch - LEDs for indicating TxD/RxD activity - DIN Rail or panel mount support - 1 USB connection - 4 DB9 connection	2 200 0000
24V Power Supply	PWR-020A24-DIN	<ul> <li>Universal AC input (88-264V AC)</li> <li>Protections: Short Circuit / Overload / Overvoltage</li> <li>Brown-out protection</li> <li>DIN Rail TS35 / 7.5 or 15 mountable</li> <li>UL1310 Class 2 Power unit / LPS pass</li> <li>UL508 (Industrial control equipment) listed</li> </ul>	

# **IntelliSense® Data Gateway**

# **Accessories**

# **Specifications**

Connectors	
USB 2.0	Quantity 3
Gigabit Ethernet	Quantity 1
19V, 65W DC Power Connector	Quantity 1

Insta	llation
Mounting Options	35mm DIN Rail using Brackets Flush Mounted using Screw Hole

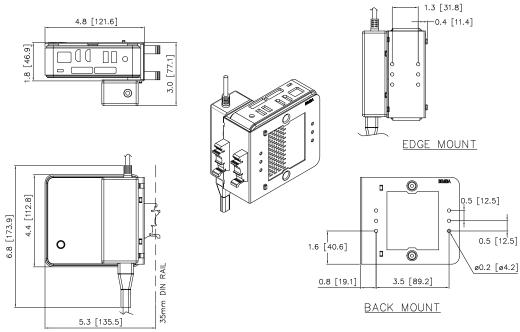
Materials	
Housing	Plastic and Aluminum
Bracket	18-Gauge Mild Steel, Black Electro-coat

Included Accessories
IntelliSense® Remote Monitoring and Configuration Software
USB Wi-Fi Adaptor
USB Extension Cable 3' (0.9m)
IntelliSense® Data Gateway Mounting Bracket
100-240VAC 10 19V DC Power Supply

Electrical and EMS Specifications	
Input Voltage	19V DC 65W
Power Supply	100-240VAC/1.5A

Enviror	nmental
Operating Temperature Range	32° F [0° C] to 131° F [55° C]
Relative Humidity	5-95% Non-condensing

Certifications
UL60950: Information Technology - Equipment - Safety - Part 1:
General Requirements



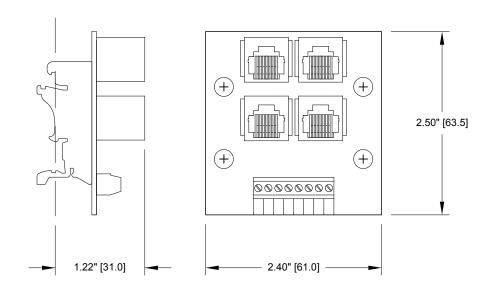
# **IntelliSense® Junction Block**

## **Accessories**

# **Specifications**

Connectors	
RJ45	Quantity 4
Terminal Block	Quantity 1
Screw Terminal Wire Size	16AWG to 26AWG

Installation		
Mounting Options	35mm DIN Rail using Brackets	
Certification		
RoHS		



## **Communications Hub - RS422 to USB**

### **Accessories**

# **Specifications**

Connectors		
USB Input	1 - Type B (4-Pin), Female	
DB9 Output	4 - 9-Pin, D-Sub, Male	
5V Power	Optional	
USB Data Cable Included	3.28 ft. [1m]	

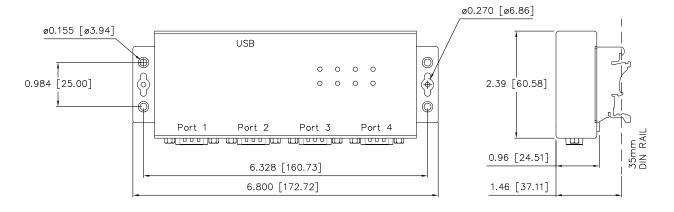
Installation	
Mounting Options	35mm DIN Rail using Brackets Flush Mounted using Screw Holes

Software Requirements
IntelliSense® Data Gateway or Windows PC with an available USB Port
Windows 8 (32-/64-bit)/7 (32-/64 bit)/ Vista (32-/64-bit), XP (32-/64-bit)/Server 2003 and 2008 (32-/64-bit)/Server 2008 R2

Electrical	
Input Voltage	Power Supplied by USB External 5V Optional
ESD Protection	±15 KV on All Signal Pins

Environmental	
Operating Temperature Range	32° F [0° C] to 130° F [55° C]
Relative Humidity	5-95% Non-condensing

Certifications	
FCC, CE, and RoHS Compliant	



# **24VDC Power Supply**

## **Accessories**

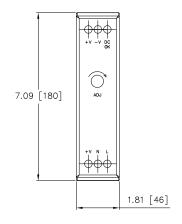
# **Specifications**

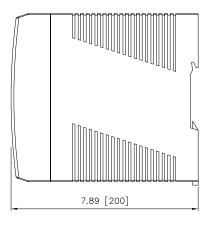
Environmental		
Operating Temperature Range	-4° F [-20° C] to 149° F [65° C]	
Relative Humidity	20-90% Non-condensing	
Vibration	10 ~ 500Hz, 2G 10 min./1 cycle, 60 min. each long X,Y,Z axes	

Installation		
35mm DIN Rail		

Certifications	
UL508	
TUV EN60950-1:2006+A11	
UL 1310 NEC class 2 compliant	

Electrical and EMS Specifications	
Output Voltage	24VDC
Maximum Output Current	1A
Input Voltage	AC 85 - 264VAC
Withstand Voltage	I/P-O/P: 4242DC I/P-FG: 2121DC 1 minute
Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG: 100M Ohms/500VDC
EMI Conduction and Radiation	EN55022:2006+A1:2007 Class B
Harmonic Current	EN61000-3-2:2006 Class A, EN61000-3-3:2008
EMS Immunity	EN61204-3:2000, EN55024: 1998+A1:2001+A2:2003 Light Industry Level, Criteria A
Protection	Overload/Overvoltage





# **IntelliSense® Sample Architectures**

There are many different ways to configure your IntelliSense networks. Here are a few basic architectures to help you design your own network. All of these architectures are easily scalable to meet you network needs. For more help developing your IntelliSense® network contact your local IntelliSense® Certified Distributor.

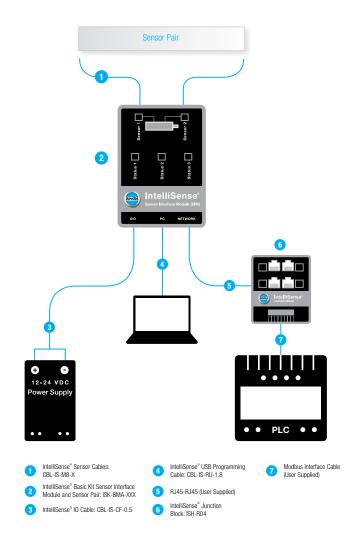
#### **BASIC MONITORING**

# 

IntelliSense® IO Cable: CBL-IS-CF-0.5

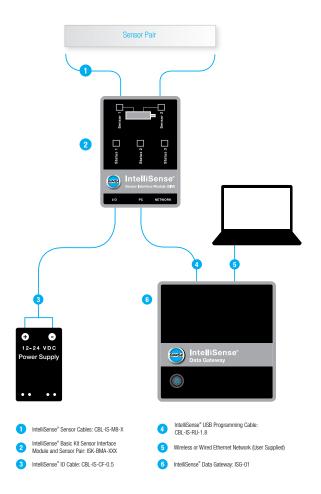
IntelliSense® USB Programming Cable: CBL-IS-RU-1.8

#### BASIC MONITORING AND MODBUS RTU NETWORK

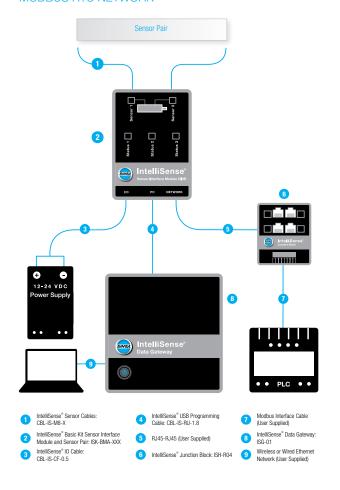


# **IntelliSense® Sample Network Architectures**

#### BASIC DATA LOGGING AND REMOTE MONITORING

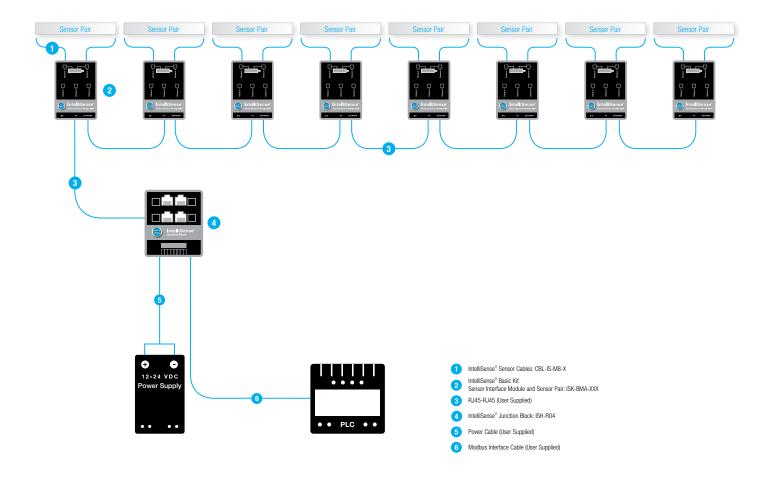


# DATA LOGGING, REMOTE MONITORING AND MODBUS RTU NETWORK



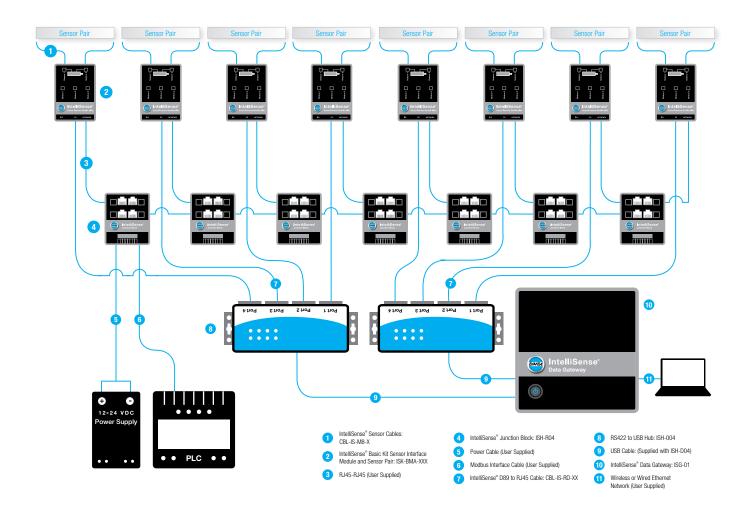
# **Examples of Network Architecture**

#### DAISY CHAINED MODBUS RTU NETWORK W/ MULTIPLE SIM



# **Examples of Network Architecture**

DATA LOGGING, REMOTE MONITORING AND MODBUS RTU NETWORK W/ MULTIPLE SIM

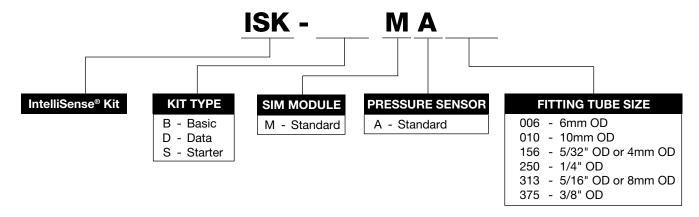


**Notes** 

# To see our warranty, please visit www.bimba.com/warranty.

## **How to Order**

The IntelliSense® Kit part number consists of five alphanumeric clusters. The clusters allow the kit to be configured to match your requirements by selecting the kit type and the tee fitting size. Only one style of SIM module and pressure sensor is available, therefore they are "fixed" in the part number as shown below.



# **IntelliSense® Kit Types**

IntelliSense® Basic Kit			
1	IntelliSense® Sensor Interface Module (SIM)		
2	IntelliSense® Pressure/Temperature Sensor		
2	IntelliSense® Fittings		

IntelliSense® Starter Kit			
1	IntelliSense® Sensor Interface Module (SIM)		
2	IntelliSense® Pressure/Temperature Sensor		
2	IntelliSense® Fittings		
2	IntelliSense® 2.0 Meter Sensor Cable		
1	IntelliSense® 0.5 Meter IO Cable		
1	IntelliSense® USB Programming Cable		
1	24V Power Supply		

IntelliSense® Data Starter Kit			
1	IntelliSense® Sensor Interface Module (SIM)		
2	IntelliSense® Pressure/Temperature Sensor		
2	IntelliSense® Fittings		
2	IntelliSense® 2.0 Meter Sensor Cable		
1	IntelliSense® 0.5 Meter IO Cable		
1	IntelliSense® USB Programming Cable		
1	IntelliSense® Data Gateway		
1	24V Power Supply		

Accessories				
IntelliSense® Data Gateway	ISG-01			
IntelliSense® Junction Block	ISH-R04			
IntelliSense® 2.0 Meter Sensor Cable	CBL-IS-M8-2			
IntelliSense® 5.0 Meter Sensor Cable	CBL-IS-M8-5			
IntelliSense® 0.5 Meter IO Cable	CBL-IS-CF-0.5			
IntelliSense® 1.8 Meter USB Programming Cable	CBL-IS-RU-1.8			
IntelliSense® 2.0 Meter DB9 to RJ45 Serial Cable	CBL-IS-RD-2			
IntelliSense® 0.5 Meter DB9 to RJ45 Serial Cable	CBL-IS-RD-0.5			
RS422 to USB HUB	ISH-D04			
24V Power Supply	PWR-020A24-DIN			

Service Parts				
IntelliSense® Pressure/Temperature Sensor	ISS-1A-7SS			
IntelliSense® Sensor Interface Module (SIM)	ISM-S1-BA1-5P			
IntelliSense® Fitting, 6mm OD Tubing	ISF-T1-006			
IntelliSense® Fitting, 10mm OD Tubing	ISF-T1-010			
IntelliSense® Fitting, 5/32" OD or 4mm OD Tubing	ISF-T1-156			
IntelliSense® Fitting, 1/4" OD Tubing	ISF-T1-250			
IntelliSense® Fitting, 5/16" OD or 8mm OD Tubing	ISF-T1-313			
IntelliSense® Fitting, 3/8" OD Tubing	ISF-T1-375			
IntelliSense® Data Gateway DIN Rail Bracket	ISG-BRKT			

Your stocking distributor is:



#### **Bimba Manufacturing Headquarters**

P.O. Box 68 Monee, Illinois 60449-0068

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