



PRODUCT CATALOG

# INTELLISENSE®

PREDICTIVE INTELLIGENCE FOR PNEUMATICS



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# INTELLISENSE®

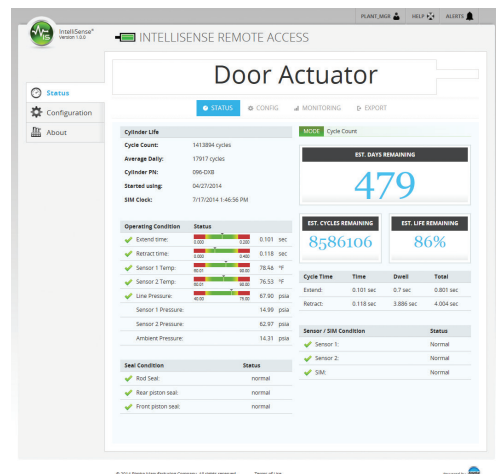
Introducing IntelliSense®, a one-of-a-kind technology platform combining sensors, cylinders, and software to deliver real-time performance data for standard pneumatic devices. With IntelliSense®, users can utilize condition-based monitoring to be proactive about maintenance and achieve system optimization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

# PRODUCT FEATURES

## SOFTWARE FEATURES

### Cylinder Status

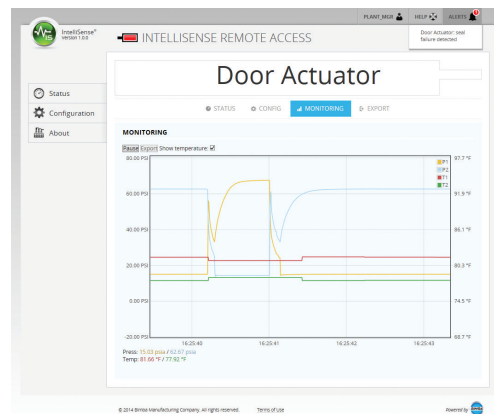
The IntelliSense® software can be installed on a PC for local monitoring of the IntelliSense® Sensor Interface Module (SIM) providing access to the current cylinder status, including cycle time, cycle count, estimated cycles remaining, estimated days of life remaining and estimated percentage of cylinder 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

### Pressure and Temperature Monitoring

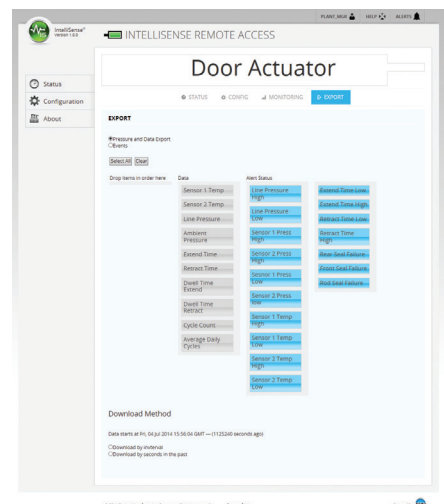
The IntelliSense® software monitoring windows stream pressure data from both sensors every millisecond and temperature data every second providing a deeper understanding of how the system is performing and guiding enhancements to the efficiency of your machine by optimizing air usage.



PRESSURE AND TEMPERATURE MONITORING

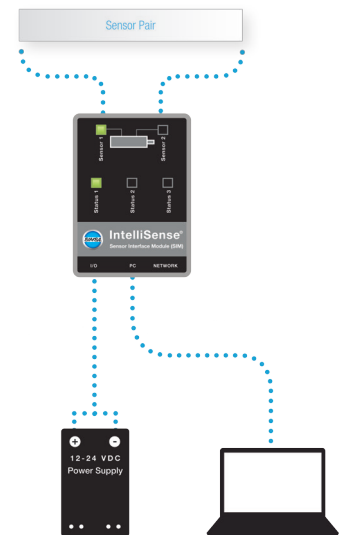
### IntelliSense® Data Gateways Data Logging

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.



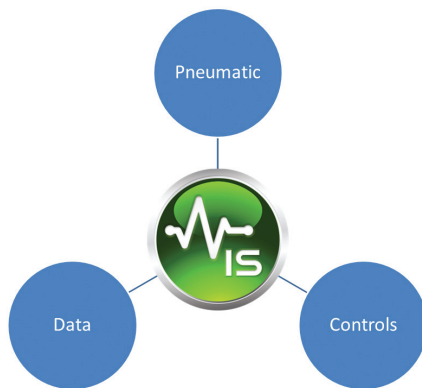
INTELLISENSE® DATA GATEWAY DATA EXPORT

- 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.

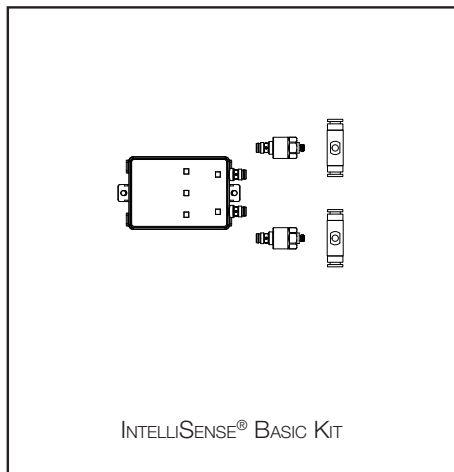
The SIM provides read only access of cylinder performance data and alerts status over MODBUS RTU to the PLC. This data can be used to modify the performance of the machine to improve efficiency or alert an operator of an impending failure.



# HOW TO SPECIFY

## INTELLISENSE® KITS

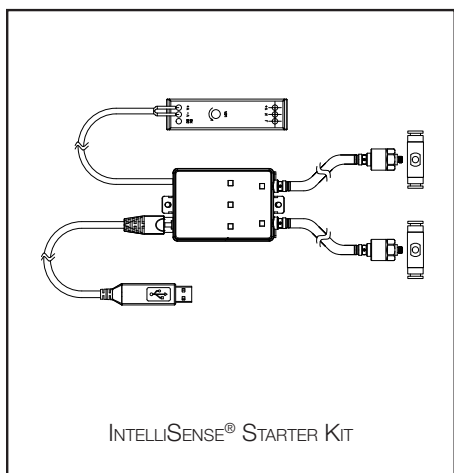
IntelliSense® hardware is available in kits or as individual components. The kits are the most cost effective way to get started with IntelliSense®.



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:

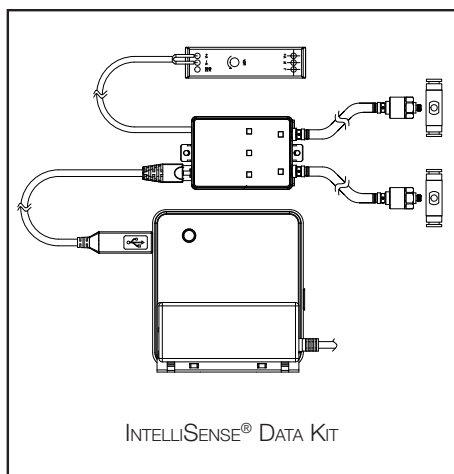
- 1 - IntelliSense® Sensor Interface Module (SIM)
- 2 - IntelliSense® Pressure/Temperature Sensor
- 2 - IntelliSense® Fittings
- 1 - USB Drive with Software



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.

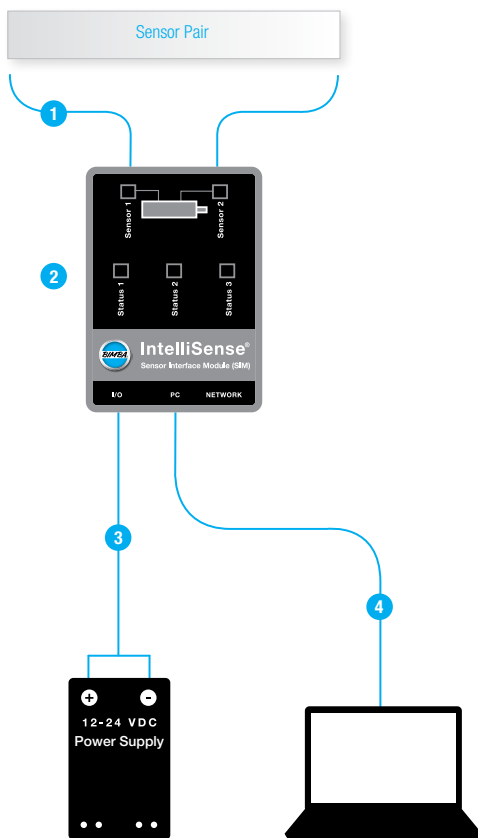
### Contents:

- 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

## INTELLISENSE® SAMPLE ARCHITECTURES

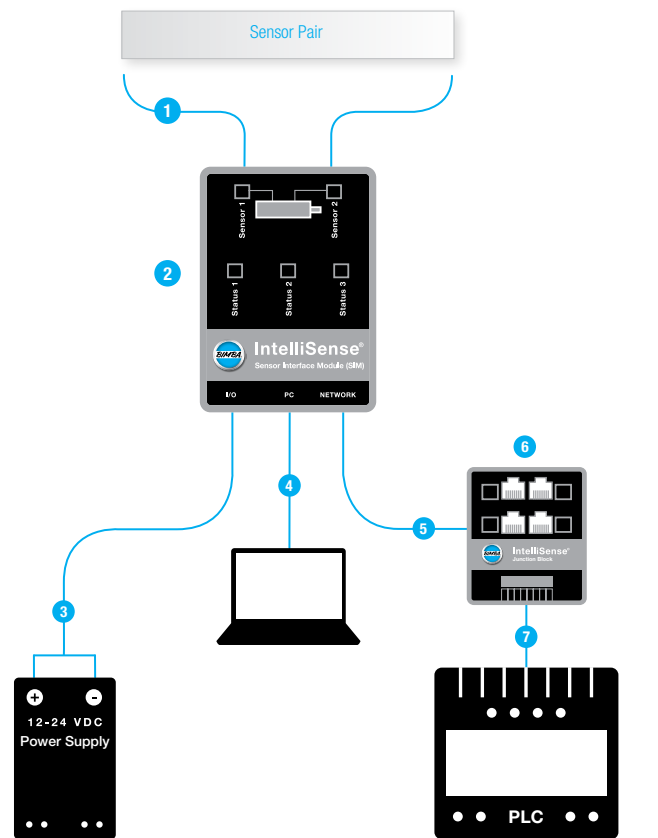
There are many different ways to configure your IntelliSense® networks. Here are a few basic architectures to help you design your own network. All of these architectures are easily scalable to meet your network needs. For more help developing your IntelliSense® network contact your local IntelliSense®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

### BASIC MONITORING



- 1 IntelliSense® Sensor Cables: CBL-IS-M8-X
- 2 IntelliSense® Basic Kit Sensor Interface Module and Sensor Pair: ISK-BMA-XXX
- 3 IntelliSense® IO Cable: CBL-IS-CF-0.5
- 4 IntelliSense® USB Programming Cable: CBL-IS-RU-1.8

### BASIC MONITORING AND MODBUS RTU NETWORK



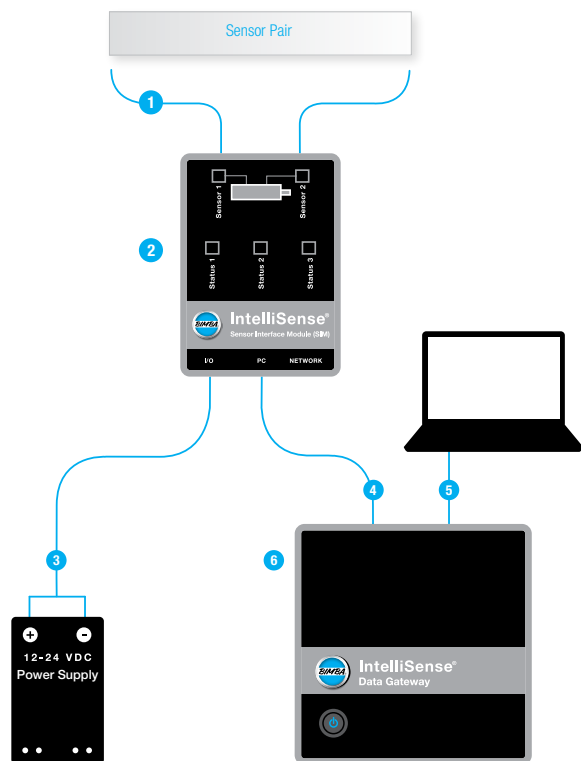
- 1 IntelliSense® Sensor Cables: CBL-IS-M8-X
- 2 IntelliSense® Basic Kit Sensor Interface Module and Sensor Pair: ISK-BMA-XXX
- 3 IntelliSense® IO Cable: CBL-IS-CF-0.5
- 4 IntelliSense® USB Programming Cable: CBL-IS-RU-1.8
- 5 RJ45-RJ45 (User Supplied)
- 6 IntelliSense® Junction Block: ISH-R04
- 7 Modbus Interface Cable (User Supplied)

# HOW TO SPECIFY

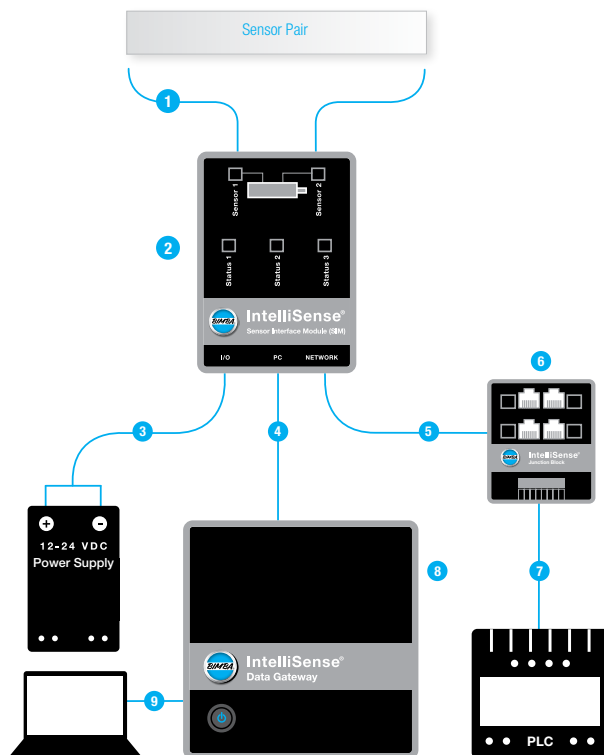
## INTELLISENSE® SAMPLE ARCHITECTURES

### BASIC DATA LOGGING AND REMOTE MONITORING

### DATA LOGGING, REMOTE MONITORING AND MODBUS RTU NETWORK



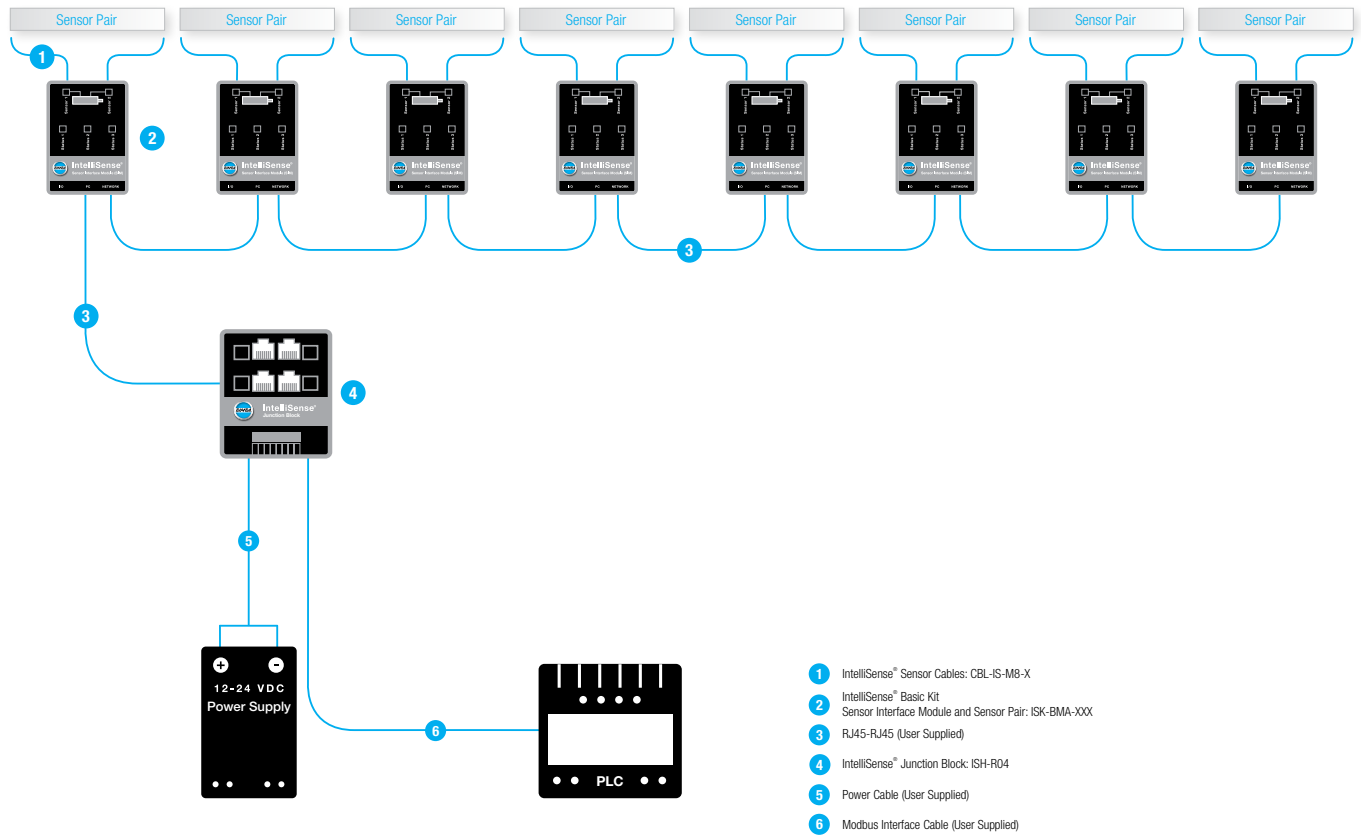
- 1 IntelliSense® Sensor Cables: CBL-IS-MB-X
- 2 IntelliSense® Basic Kit Sensor Interface Module and Sensor Pair: ISK-BMA-XXX
- 3 IntelliSense® IO Cable: CBL-IS-CF-0.5
- 4 IntelliSense® USB Programming Cable: CBL-IS-RU-1.8
- 5 Wireless or Wired Ethernet Network (User Supplied)
- 6 IntelliSense® Data Gateway: ISG-01



- 1 IntelliSense® Sensor Cables: CBL-IS-MB-X
- 2 IntelliSense® Basic Kit Sensor Interface Module and Sensor Pair: ISK-BMA-XXX
- 3 IntelliSense® IO Cable: CBL-IS-CF-0.5
- 4 IntelliSense® USB Programming Cable: CBL-IS-RU-1.8
- 5 RJ45-RJ45 (User Supplied)
- 6 IntelliSense® Junction Block: ISH-R04
- 7 Modbus Interface Cable (User Supplied)
- 8 IntelliSense® Data Gateway: ISG-01
- 9 Wireless or Wired Ethernet Network (User Supplied)

## INTELLISENSE® SAMPLE ARCHITECTURES

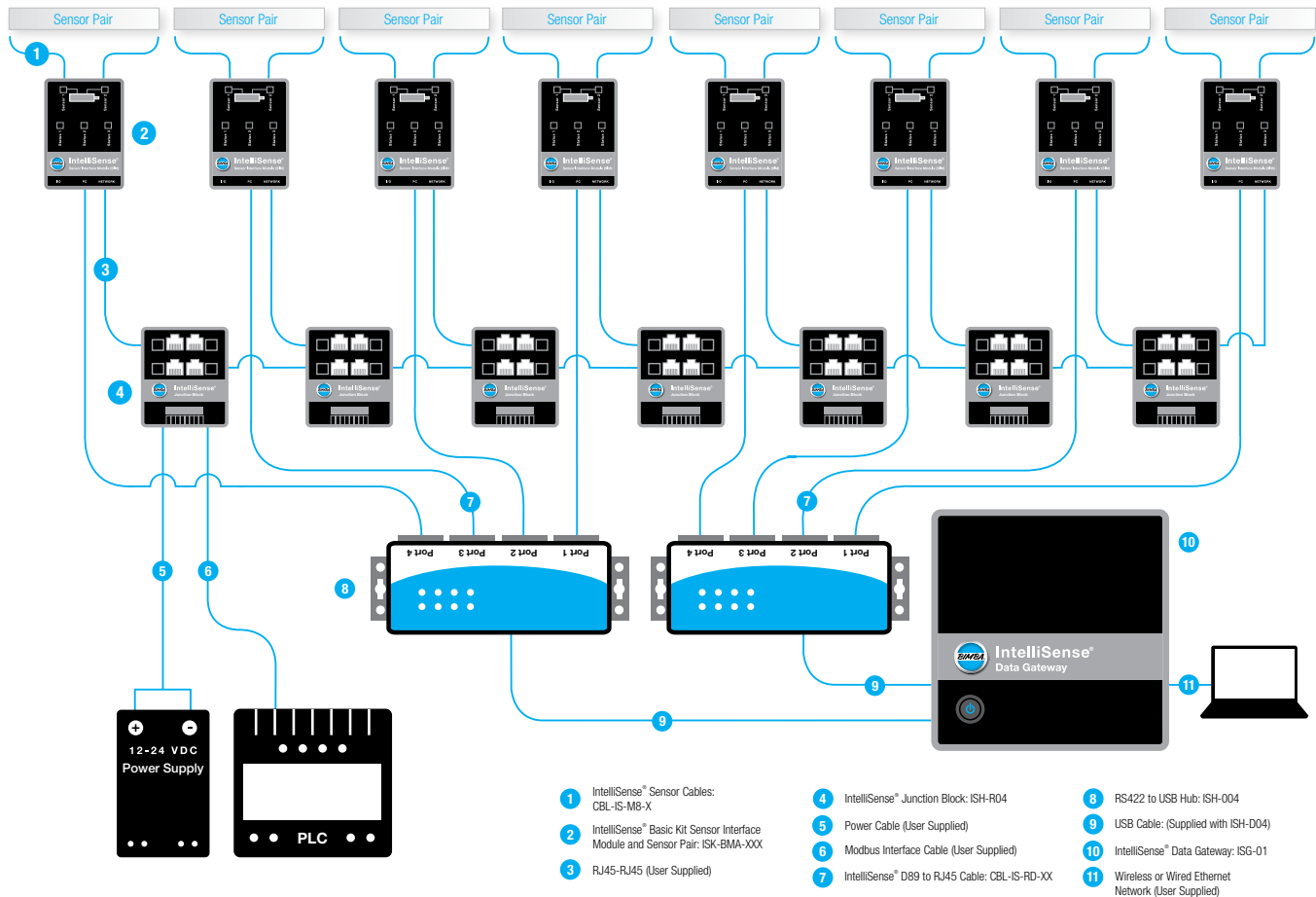
### DAISY CHAINED MODBUS RTU NETWORK W/ MULTIPLE SIM



# HOW TO SPECIFY




## INTELLISENSE® SAMPLE ARCHITECTURES

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



## SERVICE PARTS

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

Item	Part Number	Description	Image
IntelliSense® Sensor Interface Module (SIM)	ISM-S1-BA1-5P	<p>The intelligence behind IntelliSense®</p> <ul style="list-style-type: none"> <li>• Five LEDs indicate the status of the item being monitored</li> <li>• RJ45 connector for Modbus RTU communication</li> <li>• RJ45 connector for Serial RS422 communication</li> <li>• Two Male four pin micro M8 connectors for sensor communication</li> <li>• IP50 Rated</li> </ul>	
IntelliSense® Pressure/Temperature Sensor	ISS-1A-7SS	<p>Combination pressure and temperature sensor</p> <ul style="list-style-type: none"> <li>• Proprietary communication protocol for use with an IntelliSense® SIM</li> <li>• 10-32 thread SS pressure port</li> <li>• IP69K rated when used with appropriate cables</li> </ul>	
IntelliSense® Fitting	ISF-T1-006 ISF-T1-010 ISF-T1-156 ISF-T1-250 ISF-T1-313 ISF-T1-375	<p>In-line push to connect fitting</p> <ul style="list-style-type: none"> <li>• For use with PE, PA, and 95-D Polyurethane tubing</li> <li>• Metric and English sizes 4mm, 6mm, 8mm, 10mm, 5/32", 1/4", 5/16", 3/8"</li> <li>• #10-32 thread port</li> <li>• Nickel plated brass</li> <li>• Buna-N seals</li> </ul>	

# HOW TO SPECIFY

## KIT 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)]
Stainless Steel Fitting:	
Operating Pressure Range	0 psia to 200 psia [0 bar(a) to 14 bar(a)]
Overpressure Minimum Rating	400 psia [28 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]
Stainless Steel Fitting	-40° F [-40° C] to 176° F [80° C]

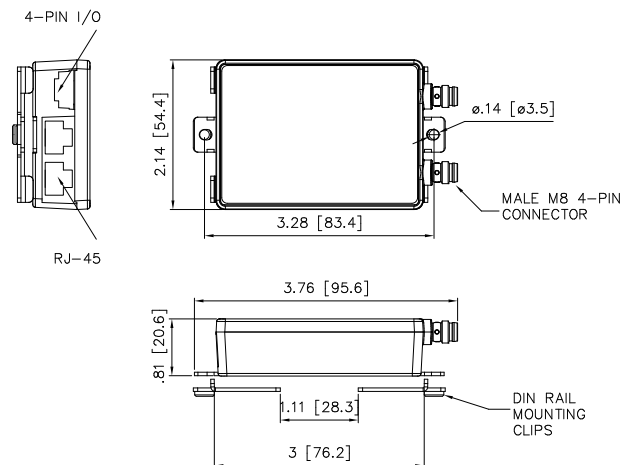
Materials	
IntelliSense® SIM:	
Housing	ABS Plastic
Back Plate	Mild Steel
IntelliSense® Pressure/Temperature Sensor:	
Housing	303 Stainless Steel
Port	303 Stainless Steel
Sensor Isolation Barrier Retaining Ring	304 Stainless Steel
Sensor Isolation Barrier	Silicone Gel
O-Ring Seal	Buna-N
IntelliSense® Fitting:	
Body	Nickel Plated Brass
Seals	Buna-N
Stainless Steel Fitting:	
Body	Stainless Steel
IntelliSense® Data Gateway:	
Housing	Plastic and Aluminum
Ingress Protection Rating	
IntelliSense® SIM	IP50
IntelliSense® Pressure/ Temperature Sensor	IP69K

## INTELLISENSE® SENSOR INTERFACE MODULE (SIM)

### Specifications

Connectors		Electrical and EMS Specifications	
Sensor	2 - Male 4 Pin M8	Input Voltage	11 to 24VDC Regulated
IO	1 - 4 Pin Molex SLTM Modular Connector	Current Draw (SIM and 2 Sensors)	<100mA @12V DC
PC	1 - RJ-45/RS-422 Serial	EMC Rating	Emissions and immunity to EN 61326:2013
Modbus	1 - RJ-45/RS-485 - Modbus RTU	Electro Static Discharge	4 kV Contact, 8 kV Air, 4 kV Indirect
Installation		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%.)
Mounting Options	35mm DIN Rail using Brackets Flush mounted using Screw Hole	Fast Transient Burst	±0.5 kV on all ports (±1kV on AC Power)
Materials		Immunity to Conducted Disturbances	3V rms 0.15-80 MHz, 80% AM Modulation @ 1 kHz
Housing	ABS	Environmental	
Back Plate	18-Gauge Mild Steel, Black Electro-Coat	IP Rating	IP50
DIN Rail Brackets	18-Gauge Mild Steel, Black Electro-Coat	Operating Temperature	-32° F [0° C] to 131° F [55° C]
Software Requirements		Vibration	5G @ 15Hz-500Hz-1hr - Random @ 0° & 55° C (Operating)
PC with an available USB Port		Shock	30G 10,000 times each axis and direction
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		Certifications	
		UL EN61326-1 (Industrial), UL EN61000-3-2, UL EN61000-3-3	
		CE	

### Dimensions inches [mm]



## INTELLISENSE® PRESSURE/TEMPERATURE SENSOR

### 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]

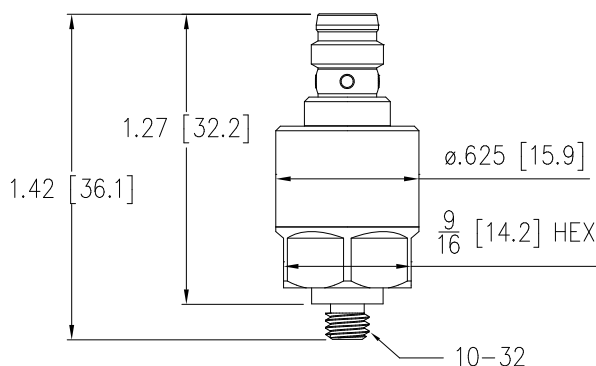
Installation	
Thread Size	10-32
Maximum Torque	in-lb [1.12 Nm]
Orientation	Mount with Pressure Port Pointing Down
Air Quality	Class 3 ISO-8573-1/5 micronfilter
Fluid	Compatible with 303 and 304 Stainless Steel, Buna-N, and Silicone Gel

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

### Dimensions inches [mm]



## INTELLISENSE® FITTING

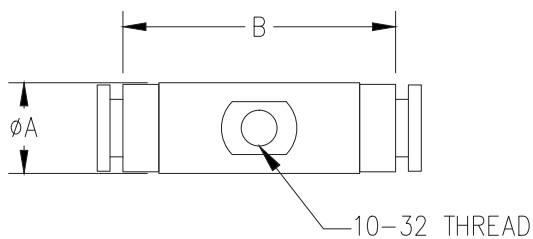
### Specifications

Materials		Environmental Specifications	
Body	Nickel Plated Brass	Operating Temperature Range	32° F [0° C] to 140° F [60° C]
Collet	Stainless Steel	Operating Pressure Range	14.7 psia to 164.7 psia [1 bar(a) to 11.4 bar(a)]
O-Ring Seal	Buna-N	Overpressure Minimum Rating	264.7 psia [18.3 bar(a)]

Recommended Tubing	
Nylon	
PE	
95-D Polyurethane	

### Dimensions inches [mm]



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]

# HOW TO ACCESSORIZE

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 DIN Rail Bracket	ISG-BRKT	Replacement DIN Rail mounting steel bracket for an IntelliSense® Data Gateway.	
IntelliSense® Data Gateway	ISG-01	Remote monitoring for up to 12 SIMs <ul style="list-style-type: none"> <li>Ethernet and wireless connectivity</li> <li>Data logging capabilities with 100+ GB of storage</li> <li>Includes IntelliSense® Data Gateway DIN rail bracket</li> </ul>	
IntelliSense® Junction Block	ISH-R04	Modbus and power Junction Block <ul style="list-style-type: none"> <li>Four RJ45 Connections</li> <li>One terminal block</li> <li>Power injector for multiple SIM</li> <li>Networking aid for Modbus</li> <li>DIN Rail mountable</li> </ul>	
IntelliSense® Sensor Cable	CBL-IS-M8-2 CBL-IS-M8-5	Sensor Cable <ul style="list-style-type: none"> <li>2.0 meter or 5.0 meter length</li> <li>90° four pin female Micro M8 Connector</li> <li>Straight four pin female Micro M8 Connector</li> <li>Connect SIM to Sensor</li> <li>2.0 meter cables included with Starter Kit and Data Starter Kit</li> <li>IP67 rated</li> </ul>	
IntelliSense® Sensor IP69K Cable	CBL-IS-M8-2-69K CBL-IS-M8-5-69K	Sensor Cable <ul style="list-style-type: none"> <li>IP69K rated</li> <li>2.0 meter or 5.0 meter length</li> <li>90° four pin female Micro M8 Connector</li> <li>Straight four pin female Micro M8 Connector</li> <li>Connect SIM to Sensor</li> </ul>	
IntelliSense® 0.5 Meter IO Cable	CBL-IS-CF-0.5	IO Cable <ul style="list-style-type: none"> <li>0.5 meter length</li> <li>Molex 50-57-9404 4 Pin Connector</li> <li>Flying lead</li> <li>Supply end of travel outputs to PLC or supply power to SIM</li> <li>Included with Starter Kit and Data Starter Kit</li> </ul>	

# HOW TO ACCESSORIZE

Item	Part Number	Description	Image
IntelliSense® 1.8 Meter USB Programming Cable	CBL-IS-RU-1.8	USB to RJ45 RS422 Serial Cable <ul style="list-style-type: none"> <li>• Required to configure SIM</li> <li>• 1.8 meter length</li> <li>• Connect SIM to PC or IntelliSense® Data Gateway</li> <li>• Included with Starter Kit and Data Starter Kit</li> </ul>	
IntelliSense® DB9 to RJ45 Serial Cable	CBL-IS-RD-0.5 CBL-IS-RD-2	DB9 to RJ45 Serial Cable <ul style="list-style-type: none"> <li>• 0.5 meter or 2.0 meter length</li> <li>• Connect SIM to RS422 to USB HUB</li> </ul>	
RS422 to USB HUB	ISH-D04	4-Port USB to RS-422/485 Serial Adapter <ul style="list-style-type: none"> <li>• Serial communication speeds up to 1Mbps</li> <li>• RS-422 and RS-485 auto detect and switch</li> <li>• LEDs for indicating TxD/RxD activity</li> <li>• DIN Rail or panel mount support</li> <li>• 1 USB connection</li> <li>• 4 DB9 connection</li> </ul>	
24V Power Supply	PWR-020A24-DIN	<ul style="list-style-type: none"> <li>• Universal AC input (88-264V AC</li> <li>• Protections: Short Circuit / Overload / Over-voltage</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>	
Stainless Steel Fittings	ISF-S1-125 ISF-S1-250 ISF-S1-375 ISF-S1-500 ISF-S1-750 ISF-S1-1000 ISF-S1-1500	In-line NPT threaded fittings <ul style="list-style-type: none"> <li>• 10-32 thread port</li> <li>• Female NPT ports in 1/8", 1/4", 3/8", 1/2", 3/4", 1", and 1-1/2" sizes</li> <li>• Stainless Steel</li> <li>• Replace standard push-to-connect fittings</li> </ul>	

# HOW TO ACCESSORIZE

## INTELLISENSE® DATA GATEWAY

### Specifications

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

Installation	
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

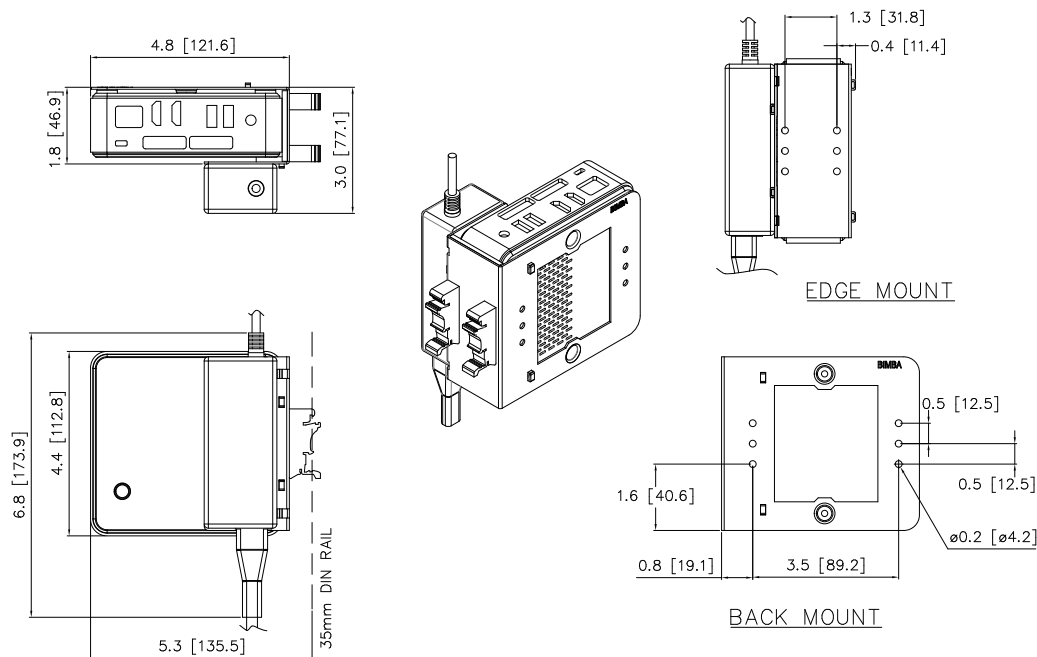
Electrical and EMS Specifications	
Input Voltage	19V DC 65W
Power Supply	100-240VAC/1.5A

Environmental Specifications	
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	

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	

### Dimensions inches [mm]

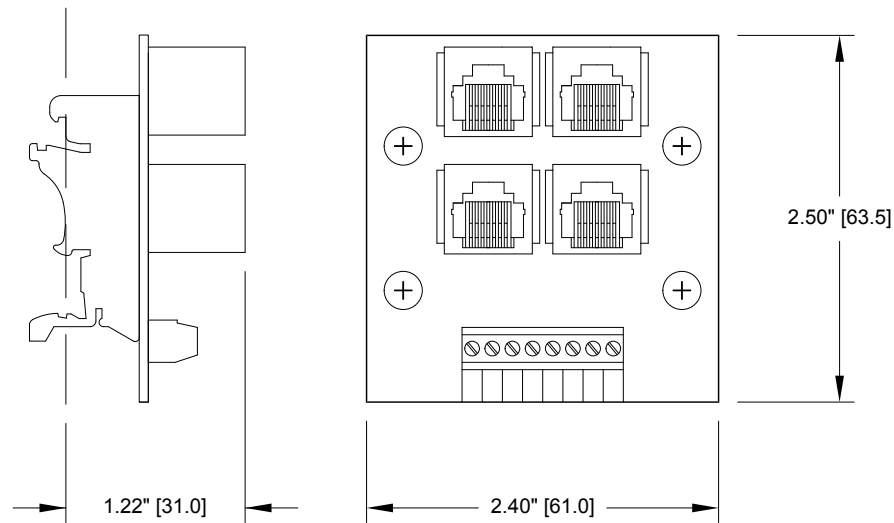


## INTELLISENSE® JUNCTION BLOCK

### Specifications

Connectors		Installation	
RJ45	Quantity 4	Mounting Options	35mm DIN Rail using Brackets
Terminal Block	Quantity 1	Certification	
Screw Terminal Wire Size	16 AWG to 26 AWG		
		RoHS	

### Dimensions inches [mm]



# HOW TO ACCESSORIZE

## COMMUNICATIONS HUB - RS422 TO USB

### 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 Hole

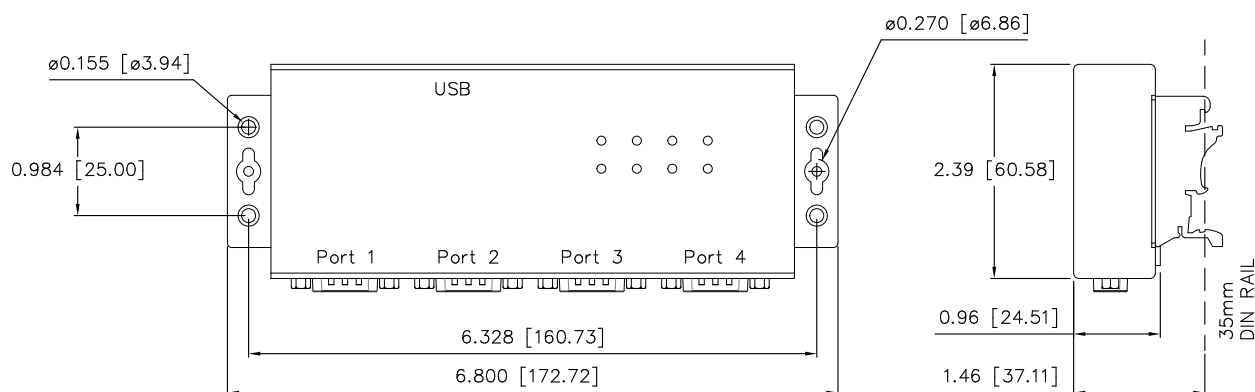
Software Requirements	
IntelliSense® Data Gateway or Windows PC with an available USB Port	
Windows 8 (32-/64-bit) / 7 (32-/64-bit) / Vista (32-/64-bit), XP (32-/64-bit) / Server 2003 and 2008 (32-/64-bit) / Server 2008 R2	

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	

### Dimensions inches [mm]



## 24VDC POWER SUPPLY

### Specifications

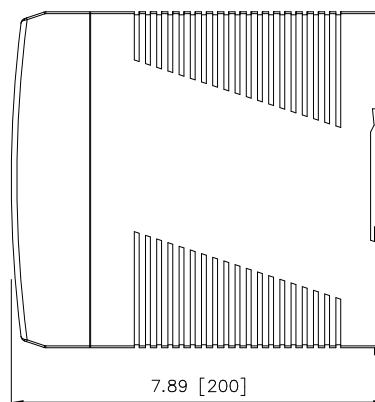
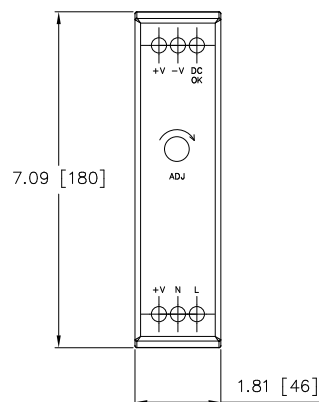
Environmental	
Operating Temperature Range	-4° F [-20° C] to 149° F [65° C]
Relative Humidity	20-95% Non-condensing
Vibration	10 ~ 500Hz, 2G 10 min./1 cycle, 60 min.each long X, Y, Z axes

Installation	
35mm DIN Rail	

Certifications	
UL508	
TUV EN60950-1:200+A11	
UL 1310 NEC class 2 compliant	

Electrical and MS 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, EN61000-3-2:2008
EMS Immunity	EN61204-3:2000, EN55024:1998+A1:2001+A2:2003 Light Industry Level, Criteria A
Protection	Overload/Overvoltage

### Dimensions inches [mm]



# HOW TO ACCESSORIZE

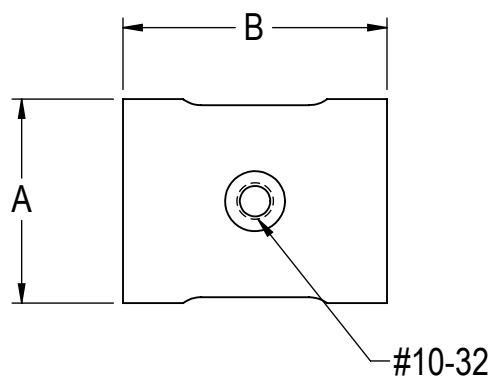
## STAINLESS STEEL FITTING

### Specifications

Environmental Specification	
Body	Stainless Steel

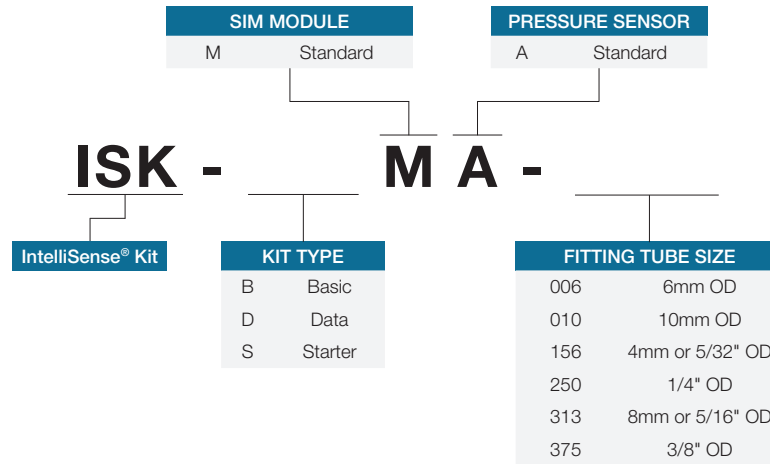
Environmental Specification	
Operating Temperature Range	-40° F [-40° C] to 176° F [80° C]
Operating Pressure Range	0 psia to 200 psia [0 bar(a) to 14 bar(a)]
Overpressure Minimum Rating	1015 psia [70 bar(a)]

### Dimensions inches [mm]



Part Number	NPT Thread	Dim A	Dim B
ISF-S1-125	1/8"	0.63 [16.00]	1.00 [25.40]
ISF-S1-250	1/4"	0.75 [19.05]	1.13 [28.70]
ISF-S1-375	3/8"	0.88 [22.35]	1.13 [28.70]
ISF-S1-500	1/2"	1.06 [26.92]	1.38 [35.05]
ISF-S1-750	3/4"	1.31 [33.27]	1.50 [38.10]
ISF-S1-1000	1"	1.63 [41.40]	1.75 [44.45]
ISF-S1-1500	1-1/2"	2.25 [57.15]	2.13 [54.10]

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

## SERVICE PARTS AND ACCESSORIES

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

Accessories	
IntelliSense® Data Gateway	ISG-01
IntelliSense® Junction Block	ISH-R04
RS422 to USB Hub	ISH-D04
Sensor Fitting, Stainless Steel, 1/8" NPT Coupler	ISF-S1-125
Sensor Fitting, Stainless Steel, 1/4" NPT Coupler	ISF-S1-250
Sensor Fitting, Stainless Steel, 3/8" NPT Coupler	ISF-S1-375
Sensor Fitting, Stainless Steel, 1/2" NPT Coupler	ISF-S1-500
Sensor Fitting, Stainless Steel, 3/4" NPT Coupler	ISF-S1-750
Sensor Fitting, Stainless Steel, 1" NPT Coupler	ISF-S1-1000
Sensor Fitting, Stainless Steel, 1-1/2" NPT Coupler	ISF-S1-1500
IntelliSense® 2.0 Meter Sensor Cable IP67	CBL-IS-M8-2
IntelliSense® 5.0 Meter Sensor Cable IP67	CBL-IS-M8-5
IntelliSense® 2.0 Meter Sensor Cable IP69K	CBL-IS-M8-2-69K
IntelliSense® 5.0 Meter Sensor Cable IP69K	CBL-IS-M8-5-69K
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
24V Power Supply	PWR-020A24-DIN

Your stocking distributor is:



**Bimba Manufacturing Headquarters**

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