

iTrax[®] Spray Monitor with Can-in-Pocket Feature

Customer Product Manual

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– English –

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Solutions Customer Support Center at (800) 433-9319 or
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Contact Us

Nordson Corporation welcomes requests for information, comments, and inquiries about its products. General information about Nordson can be found on the Internet using the following address:

<http://www.nordson.com>.

<http://www.nordson.com/en/global-directory>

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Safety

Introduction

Read and follow these safety instructions. Task- and equipment-specific warnings, cautions, and instructions are included in equipment documentation where appropriate.

Make sure all equipment documentation, including these instructions, is accessible to persons operating or servicing equipment.

Qualified Personnel

Equipment owners are responsible for making sure that Nordson equipment is installed, operated, and serviced by qualified personnel. Qualified personnel are those employees or contractors who are trained to safely perform their assigned tasks. They are familiar with all relevant safety rules and regulations and are physically capable of performing their assigned tasks.

Intended Use

Use of Nordson equipment in ways other than those described in the documentation supplied with the equipment may result in injury to persons or damage to property.

Some examples of unintended use of equipment include:

- using incompatible materials
- making unauthorized modifications
- removing or bypassing safety guards or interlocks
- using incompatible or damaged parts
- using unapproved auxiliary equipment
- operating equipment in excess of maximum ratings

Regulations and Approvals

Make sure all equipment is rated and approved for the environment in which it is used. Any approvals obtained for Nordson equipment will be voided if instructions for installation, operation, and service are not followed.

Personal Safety

To prevent injury follow these instructions.

- Do not operate or service equipment unless you are qualified.
- Do not operate equipment unless safety guards, doors, or covers are intact and automatic interlocks are operating properly. Do not bypass or disarm any safety devices.
- Keep clear of moving equipment. Before adjusting or servicing moving equipment, shut off the power supply and wait until the equipment comes to a complete stop. Lock out power and secure the equipment to prevent unexpected movement.
- Relieve (bleed off) hydraulic and pneumatic pressure before adjusting or servicing pressurized systems or components. Disconnect, lock out, and tag switches before servicing electrical equipment.
- While operating manual spray guns, make sure you are grounded. Wear electrically conductive gloves or a grounding strap connected to the gun handle or other true earth ground. Do not wear or carry metallic objects such as jewelry or tools.
- If you receive even a slight electrical shock, shut down all electrical or electrostatic equipment immediately. Do not restart the equipment until the problem has been identified and corrected.
- Obtain and read Safety Data Sheets (SDS) for all materials used. Follow the manufacturer's instructions for safe handling and use of materials, and use recommended personal protection devices.
- Make sure the spray area is adequately ventilated. To prevent injury, be aware of less-obvious dangers in the workplace that often cannot be completely eliminated, such as hot surfaces, sharp edges, energized electrical circuits, and moving parts that cannot be enclosed or otherwise guarded for practical reasons.

High-Pressure Fluids

High-pressure fluids, unless they are safely contained, are extremely hazardous. Always relieve fluid pressure before adjusting or servicing high pressure equipment. A jet of high-pressure fluid can cut like a knife and cause serious bodily injury, amputation, or death. Fluids penetrating the skin can also cause toxic poisoning.

If you suffer a fluid injection injury, seek medical care immediately. If possible, provide a copy of the SDS for the injected fluid to the health care provider.

The National Spray Equipment Manufacturers Association has created a wallet card that you should carry when you are operating high-pressure spray equipment. These cards are supplied with your equipment. The following is the text of this card:



WARNING: Any injury caused by high pressure liquid can be serious. If you are injured or even suspect an injury:

- Go to an emergency room immediately.
- Tell the doctor that you suspect an injection injury.
- Show them this card
- Tell them what kind of material you were spraying

MEDICAL ALERT — AIRLESS SPRAY WOUNDS: NOTE TO PHYSICIAN

Injection in the skin is a serious traumatic injury. It is important to treat the injury surgically as soon as possible. Do not delay treatment to research toxicity. Toxicity is a concern with some exotic coatings injected directly into the bloodstream.

Consultation with a plastic surgeon or a reconstructive hand surgeon may be advisable.

The seriousness of the wound depends on where the injury is on the body, whether the substance hit something on its way in and deflected causing more damage, and many other variables including skin microflora residing in the paint or gun which are blasted into the wound. If the injected paint contains acrylic latex and titanium dioxide that damage the tissue's resistance to infection, bacterial growth will flourish. The treatment that doctors recommend for an injection injury to the hand includes immediate decompression of the closed vascular compartments of the hand to release the underlying tissue distended by the injected paint, judicious wound debridement, and immediate antibiotic treatment.

Fire Safety

To avoid a fire or explosion, follow these instructions.

- Ground all conductive equipment. Use only grounded air and fluid hoses. Check equipment and workpiece grounding devices regularly. Resistance to ground must not exceed one megohm.
- Shut down all equipment immediately if you notice static sparking or arcing. Do not restart the equipment until the cause has been identified and corrected.
- Do not smoke, weld, grind, or use open flames where flammable materials are being used or stored. Do not heat materials to temperatures above those recommended by the manufacturer. Make sure heat monitoring and limiting devices are working properly.
- Provide adequate ventilation to prevent dangerous concentrations of volatile particles or vapors. Refer to local codes or your material SDS for guidance.
- Do not disconnect live electrical circuits when working with flammable materials. Shut off power at a disconnect switch first to prevent sparking.
- Know where emergency stop buttons, shutoff valves, and fire extinguishers are located. If a fire starts in a spray booth, immediately shut off the spray system and exhaust fans.
- Shut off electrostatic power and ground the charging system before adjusting, cleaning, or repairing electrostatic equipment.
- Clean, maintain, test, and repair equipment according to the instructions in your equipment documentation.
- Use only replacement parts that are designed for use with original equipment. Contact your Nordson representative for parts information and advice.

Halogenated Hydrocarbon Solvent Hazards

Do not use halogenated hydrocarbon solvents in a pressurized system that contains aluminum components. Under pressure, these solvents can react with aluminum and explode, causing injury, death, or property damage. Halogenated hydrocarbon solvents contain one or more of the following elements:

<u>Element</u>	<u>Symbol</u>	<u>Prefix</u>
Fluorine	F	“Fluoro-”
Chlorine	Cl	“Chloro-”
Bromine	Br	“Bromo-”
Iodine	I	“Iodo-”

Check your material SDS or contact your material supplier for more information. If you must use halogenated hydrocarbon solvents, contact your Nordson representative for information about compatible Nordson components.

Action in the Event of a Malfunction

If a system or any equipment in a system malfunctions, shut off the system immediately and perform the following steps:

- Disconnect and lock out system electrical power. Close hydraulic and pneumatic shutoff valves and relieve pressures.
- Identify the reason for the malfunction and correct it before restarting the system.

Disposal

Dispose of equipment and materials used in operation and servicing according to local codes.

Description

The Nordson iTrax Spray Monitor System detects problems in coating application systems by monitoring the fluid pressure inside the spray gun, provides warnings and alarms to the operators, and stores process data for quality control. The system consists of:

- one or more iTrax Spray Monitors, and
- the iTrax OPC Server and OPC Local Client (Operator Interface) software (which includes a USB-to-CAN network adapter, USB cable and CAN termination resistor).

NOTE: Each spray gun monitored by the iTrax Spray Monitor System must have a pressure transducer (sensor) and the Nordson Spray Pressure Control System installed. Contact your Nordson representative or refer to the Spray Pressure Control Manifold manual for more information.

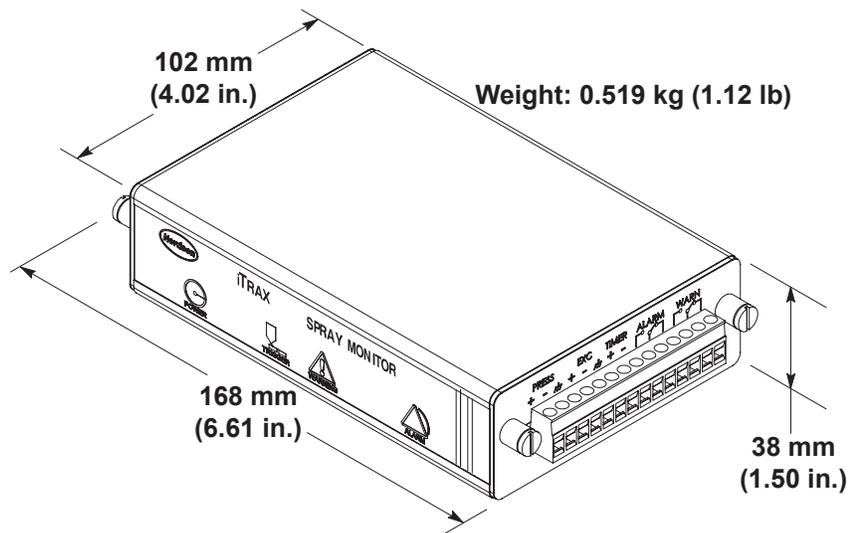


Figure 1 iTrax Spray Monitor

The iTrax Operator Interface runs on an IBM-compatible personal or industrial computer with the Windows XP operating system. Communications between the computer running the iTrax Operator Interface and the Spray Monitors is through a CAN (Controller Area Network) network and a USB-to-CAN network adapter.

Up to 64 Spray Monitors can be connected to a single CAN network. However, if you install the OPC Server and OPC Local Client on a single computer, you should limit the number of Spray Monitors to 40. Screen refresh times can become noticeably long for greater numbers of Spray Monitors.

This manual covers Spray Monitor installation, configuration, and parts. Refer to the online Help system in the iTrax Operator Interface for system configuration, calibration, setup, and operation.

Optional Features

Your iTrax Control System may have any of the following options listed in Table 1. Talk to your Nordson representative about adding these options to your system.

Table 1 Optional Features

Optional Feature	Description
iTrax OPC Remote Client	The optional OPC Remote Client application allows the iTRAX Spray Monitor System OI to be viewed on additional computers on your ethernet network.
iTrax OPC Data Logger	The optional OPC Data Logger application has powerful graphing and data archiving capabilities and comes with its own online help system. When the OPC Data Logger is installed, a shortcut is created on the Windows desktop.
Spray Monitor Can-In-Pocket Sensor	<p>The Can-In-Pocket (CIP) feature uses a proximity sensor to verify that a can has fallen into the spray pocket before the spray gun fires. CIP allows the Spray Monitor to verify that a timer signal is received for every can that is detected.</p> <p>Refer to <i>Optional Can-In-Pocket Sensor Wiring</i> on page 17 for information about wiring the CIP sensor to the Spray Monitor. The CIP function must be turned on and configured through the iTrax Operator Interface.</p>
Spray Monitor Spray Duration Output	<p>The Spray Duration Output feature is used to monitor the actual spray duration based on the pressure drop when the gun is truly on.</p> <p>Refer to <i>Input/Output Connections</i> on page 16 for information about wiring the Spray Duration Output. The spray duration output feature must be turned on and configured through the iTrax Operator Interface.</p>
Spray Monitor iTrax 24 V Trigger Board	The Trigger Board provides direct compatibility with sourcing 24 VDC PLC outputs.
Spray Controller	The Spray Controller provides timing control and gun drive functions for one Nordson spray gun and one CleanSprayr gun.
Pressure Controller	The Pressure Controller provides closed-loop pressure control, spinner speed, and expanded Can-in-Pocket features such as vacuum, Gun-in-Position, and temperature.

Spray Monitor Requirements

NOTE: For compliance with the European Union Electromagnetic Compatibility Directive, refer to *EMC Directive Requirements*.

The following customer-supplied hardware is required to install the Spray Monitors:

- Power Supply: 24 Vdc, 200 mA required per Spray Monitor
- Network Cable: RS-485 (Belden 9841 or equivalent)

NOTE: Total CAN network cable length cannot exceed 75 meters.

- Enclosure: IP54 or better metal enclosure
- Pressure Sensor and Can-In-Pocket Cables: Two twisted, shielded 22 AWG pair (Belden 8723 or equivalent)
- Cable, as required, for timer input, spray output, and warning/alarm outputs

EMC Directive Compliance

See Figure 5 for electrical requirements.

The following customer-supplied hardware is required to install the Spray Monitors:

1. Mount the Spray Monitor in an IP54 or better metal enclosure.
2. Use an AC line filter (Corcom 3EQ1, or equivalent).
3. Use a CE-labeled power supply (Idec PS5R-C24, or equivalent).
4. For general safety fuse L1 and L2.
5. All customer-supplied cables must be shielded and terminated.

Installation



WARNING: Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation. All installations must conform to national and local codes.

Installation of the iTrax Spray Monitors consists of configuration, mounting, and electrical connections. Spray Monitor configuration and calibration is done through the iTrax Operator Interface.

NOTE: For compliance with the European Union Electromagnetic Compatibility Directive, refer to *EMC Directive Requirements*.

Conditions of Warranty

The iTrax Spray Monitor must be installed and wired according to the specifications provided herein. Other than technical support provided under warranty for defective equipment, Nordson will not provide complimentary post-sale technical support if the installation does not comply with the requirements stated in this manual and local electrical code.

Furthermore, if post-sale technical services are performed and the installation is found to be non-compliant with these requirements, then the customer will be invoiced and will be responsible for payment of the charges associated with the service.

Spray Monitor Configuration



CAUTION: Electrostatic sensitive device: To avoid damaging the circuit board wear an ESD wriststrap and use proper grounding techniques.

Configure the Spray Monitor before you mount it.

1. Unplug the terminal block connectors from both ends of the Spray Monitor.
2. See Figure 14. Loosen one set of end plate screws and the circuit board screw from the bottom of the enclosure.
3. Slide the circuit board and end cap out of the enclosure.
4. See Figure 3. Make the following settings:

Table 2 iTrax Spray Monitor Circuit Board Switches and Jumper Settings

Setting	Function/Procedure
Power Switch (SW1)	Removes power to the Spray Monitor and pressure and Can-In-Pocket sensors. Default position is up (ON). Set switch to down (OFF) position before working on interface wiring or sensors.
Network Address Switches (SW2, SW3)	Each Spray Monitor must have a unique address, from 01- 64. Rotate switch SW2 (MSB) to set the 10s, and switch SW3 (LSB) to set the 1s. For example, for address 02, set SW2 to 0 and SW3 to 2.
Trigger (Timer) Interface Jumpers (J102)	Set the jumpers on J102 for Sinking or Sourcing, depending on the gun timer signal. Use these settings for 24 Vdc timer signals. Refer to the diagram on the other end of the circuit board for jumper positions. See Figure 2 for additional information to determine settings for sinking and sourcing.
Alarm and Warning Output Jumpers (J103, J104)	Set the jumpers on J103 (Alarm) and J104 (Warning) for Relay (1- 2) or Solid State (2- 3), as desired. Your wiring connections determine whether these function as normally open or normally closed.
Watchdog Override Jumper (J105)	 CAUTION: Do not change the default setting of J105. J105 is for software development purposes only.
Can-In-Pocket Jumpers (J3)	Set the jumpers on J3 for either sinking or sourcing, depending on the Can-In-Pocket sensor type.

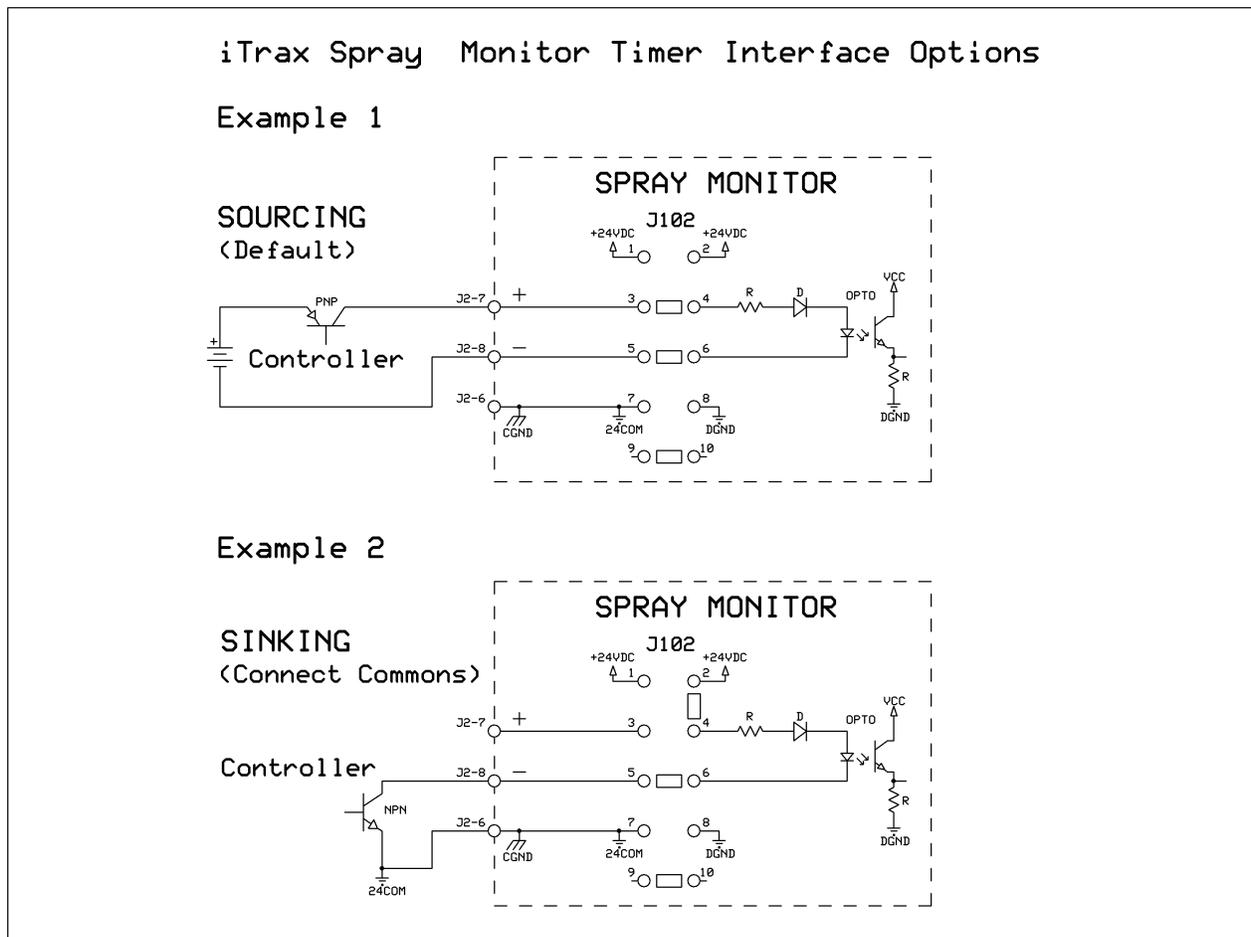


Figure 2 Setting Trigger (Timer) Interface for Sinking or Sourcing

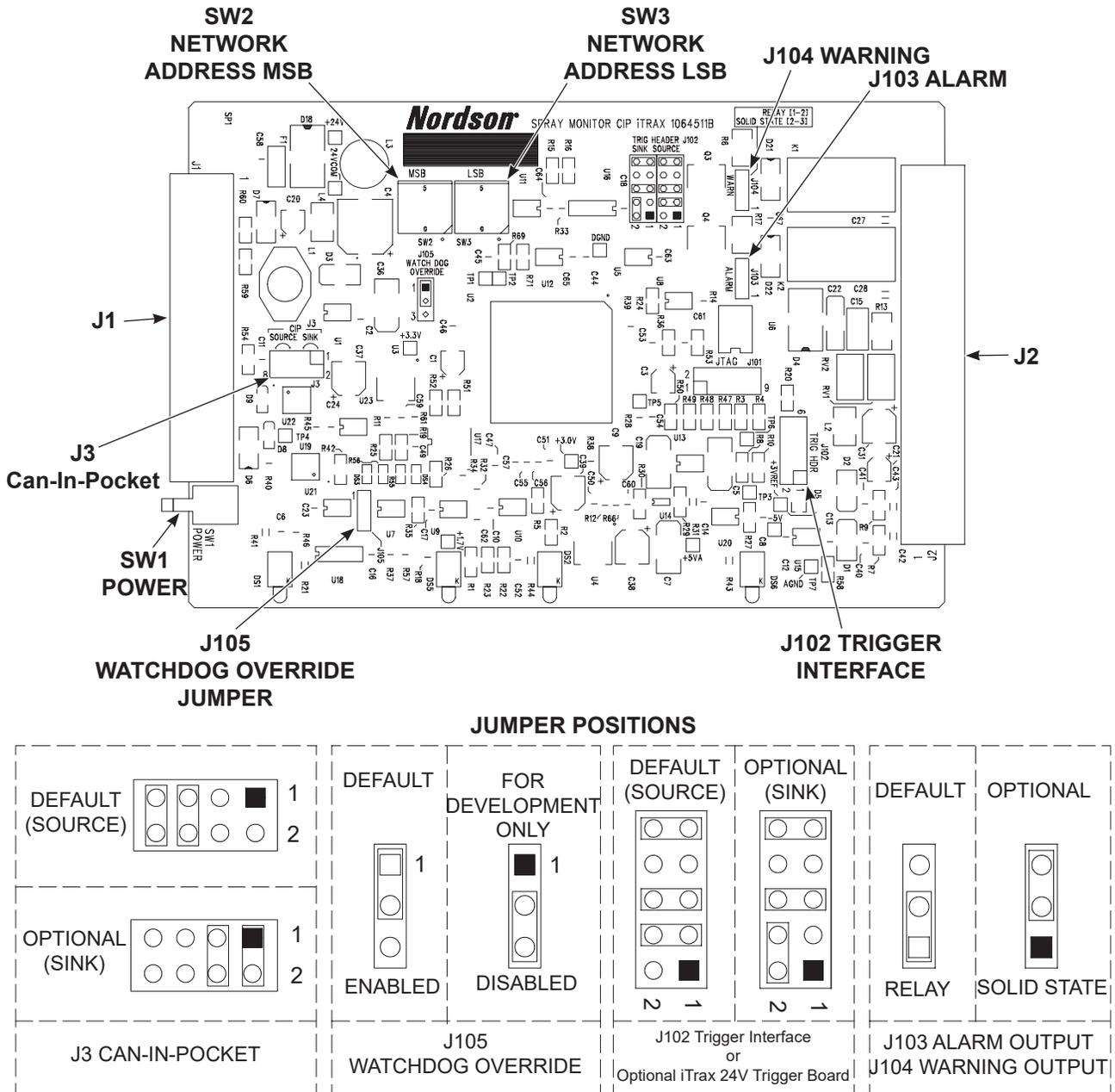


Figure 3 Spray Monitor Circuit Board Switches and Jumper Settings Spray Monitor Mounting

Spray Monitor Mounting

NOTE: For compliance with the European Union Electromagnetic Compatibility Directive, refer to the EMC Directive Requirements on page 7.

See Figure 4. Mount the Spray Monitor on a flat surface or a DIN rail (a DIN rail clip is provided). The mounting area should be free of vibration, excessive dust, and moisture. Ambient temperatures must not exceed 0–50 °C (32–104 °F). One DIN mounting clip and three M4 x 6 screws are shipped with each Spray Monitor.

If the included screws are not long enough to mount the Spray Monitor on a flat surface, use the following formula to determine the required screw length:

Panel Thickness + 6.35 mm (0.25 in.) max depth = Screw Length

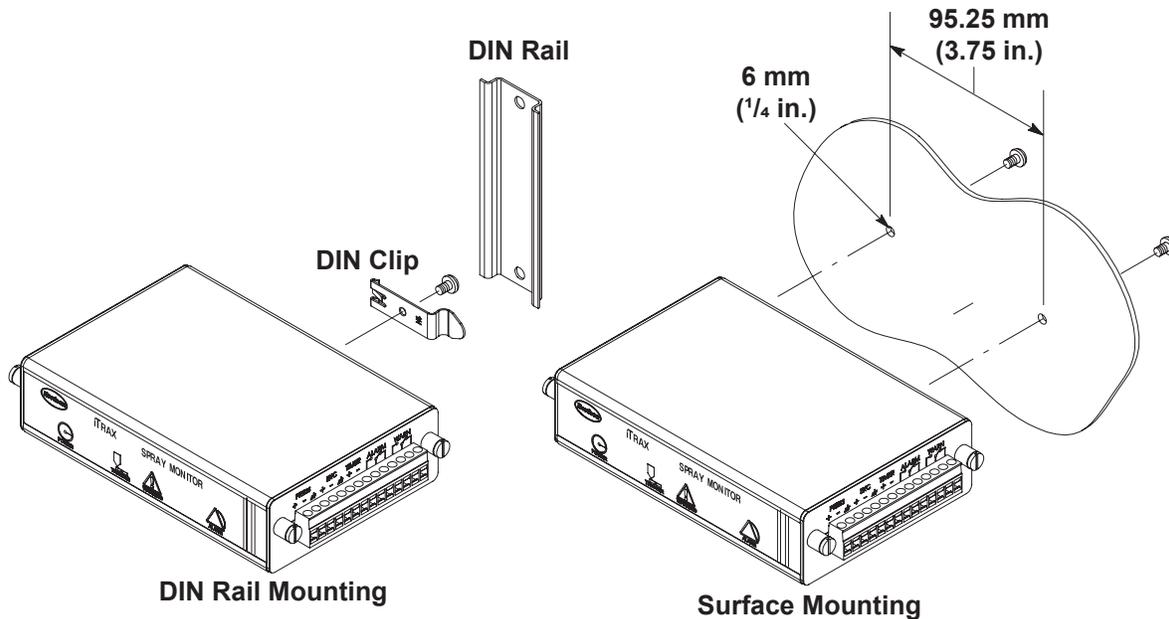


Figure 4 Spray Monitor Mounting

System Wiring

See Table 3 and Figure 5 through Figure 8. Refer to *Spray Monitor Requirements* for cables and other hardware. The Spray Monitors are equipped with removable terminal block connectors.

NOTE: For compliance with the European Union Electromagnetic Compatibility Directive, refer to *EMC Directive Requirements* on page 8.

NOTE: Unless otherwise noted, all wiring is customer supplied.

Table 3 P1 Pinouts

Function	Label	Pin Number	Signal Specification	Signal Type
POWER Power Input	+24V	1	+24 VDC +/- 4 V @200 mA + load	Power Input
		2	24 VDC COM	Power Common
COMM CAN BUS Network		3	Chassis Ground	CAN Network Shield
	A	4	CAN BUS A (+)	CAN Network
	B	5	CAN BUS B (-)	CAN Network
CIP Can-In-Pocket Sensor	+	6	Sensor Excitation: +24 VDC +/-4 V @ 25 mA max	Power Output to CIP
	S	7	Sensor Signal Input (sourcing default)	Input from CIP
		8	Sensor Signal Return: 24 VDC COM	Power Common to CIP
OUT Spray Duration Signal	+	9	+24 VDC +/- 4 V @ 25 mA max	Power Input from PLC
	S	10	Isolated Signal Output (sourcing default)	Sourcing Output to PLC
		11	Signal Return: 24 VDC COM	Power Common from PLC

Table 4 P2 Pinouts

Function	Label	Pin Number	Signal Specification	Signal Type
PRESS Pressure Sensor Input	+	1	Signal Input High	Differential Input
	-	2	Signal Input Low	Differential Input Offset
		3	Chassis Ground	Sensor Shield
EXC Pressure Sensor Excitation	+	4	+24 VDC +/-4 V @ 250 mA max	Power Output to Sensor
	-	5	24 VDC COM	Power Common to Sensor
TIMER PLC/Timer Input		6	Chassis Ground	Timer shield
	+	7	Signal Input (sourcing default)	Input from Timer
	-	8	Signal Return	Input from Timer
ALARM Alarm Contact		9	30 VDC @ 5 A max	Normally Open Contact
		10	30 VDC @ 5 A max	Relay Pole
		11	30 VDC @ 5 A max	Normally Closed Contact
WARN Warning Contact		12	30 VDC @ 5 A max	Normally Open Contact
		13	30 VDC @ 5 A max	Relay Pole
		14	30 VDC @ 5 A max	Normally Closed Contact

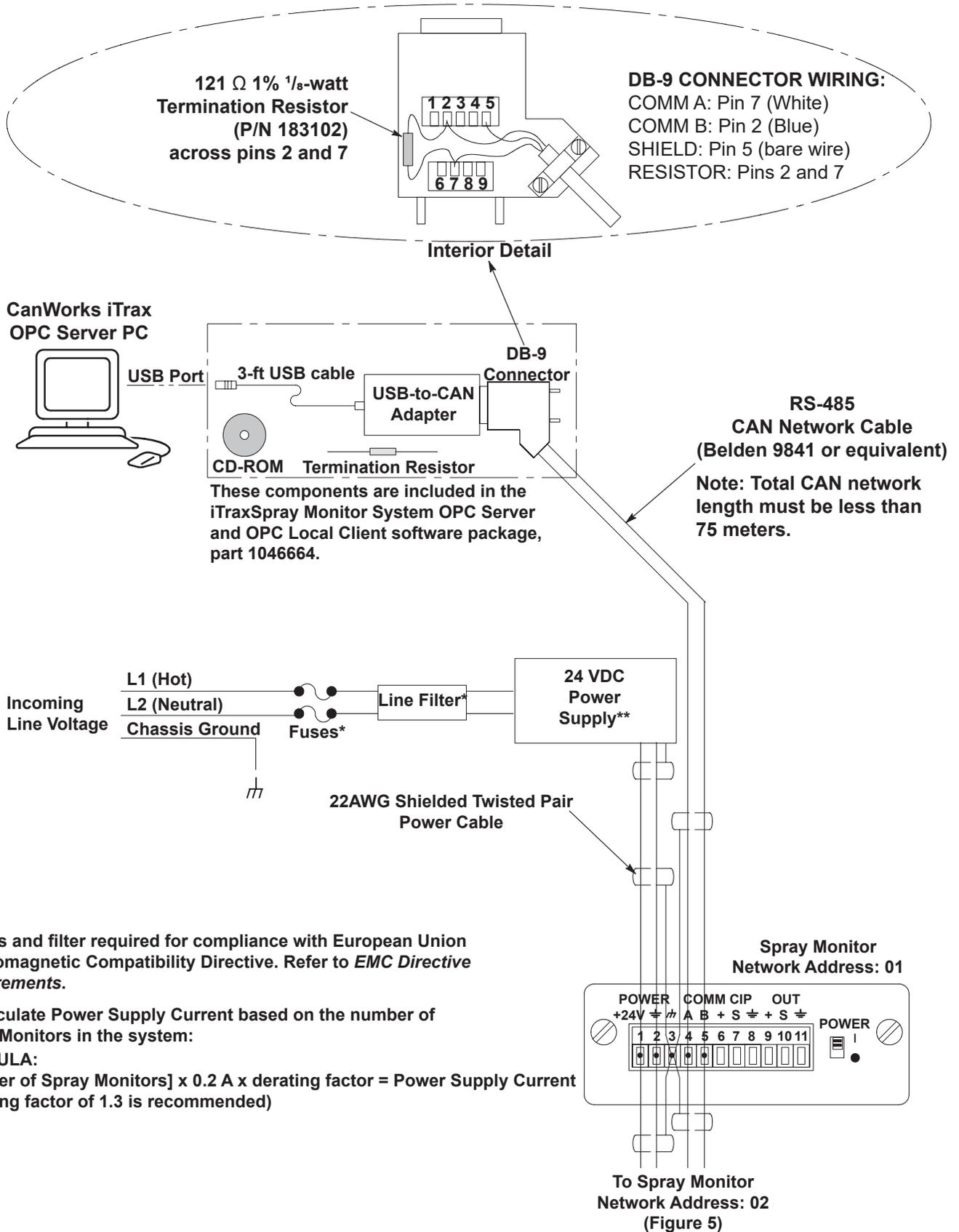


Figure 5 Network and Power Connections to First Spray Monitor on Network

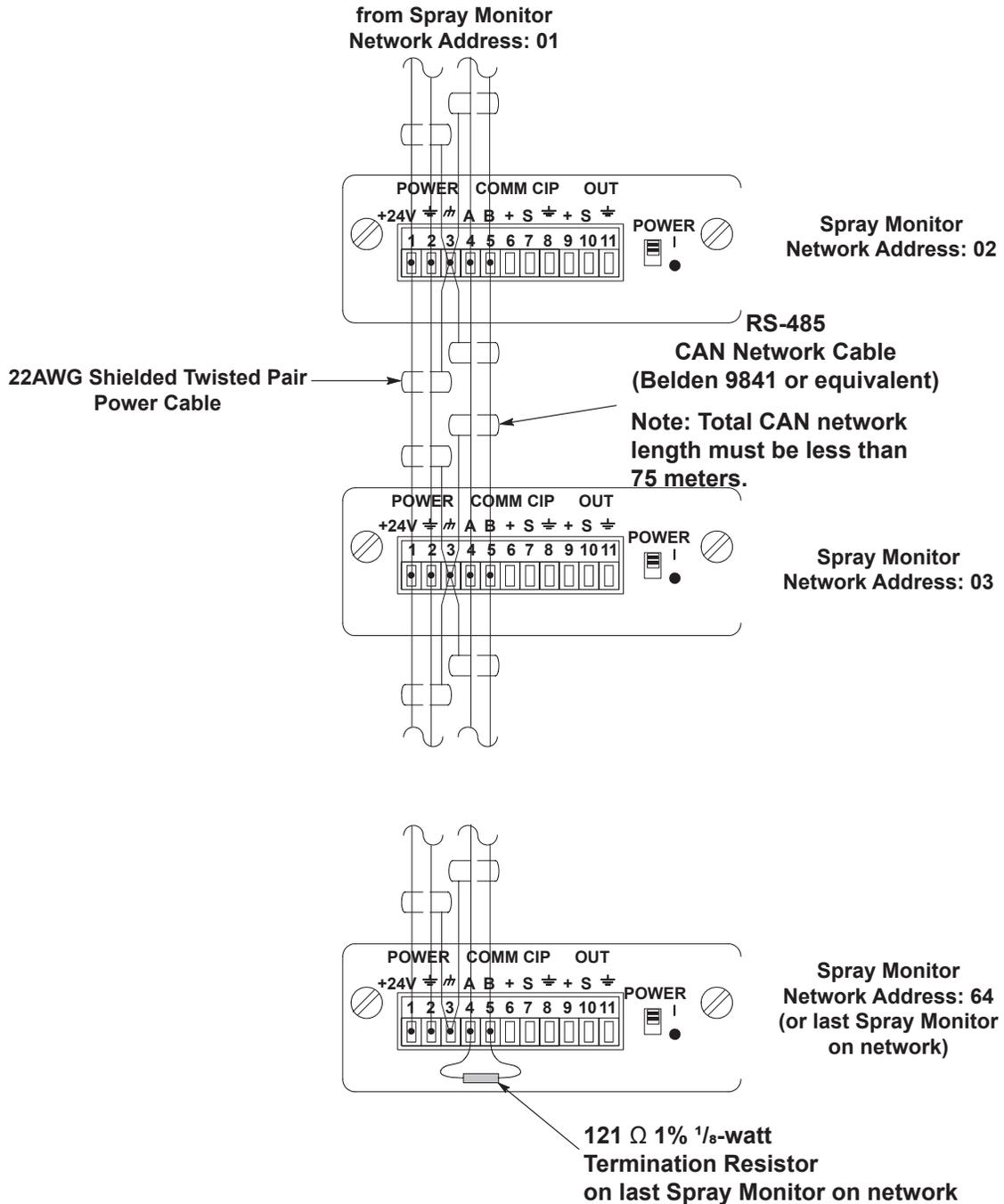


Figure 6 Network and Power Connections to Remaining Spray Monitors on Network

Can-to-USB Adapter Installation

Refer to the *Let's get started* guide included with the iTrax Spray Monitor System software package for CAN-to-USB adapter and software installation instructions.

Input/Output Connections

NOTE: The Spray Duration Output is an optional connection that functions while there are no alarm conditions and if the gun-open time is set to a value that is greater than the true open-response time. Talk to your Nordson representative about adding this option to your system.

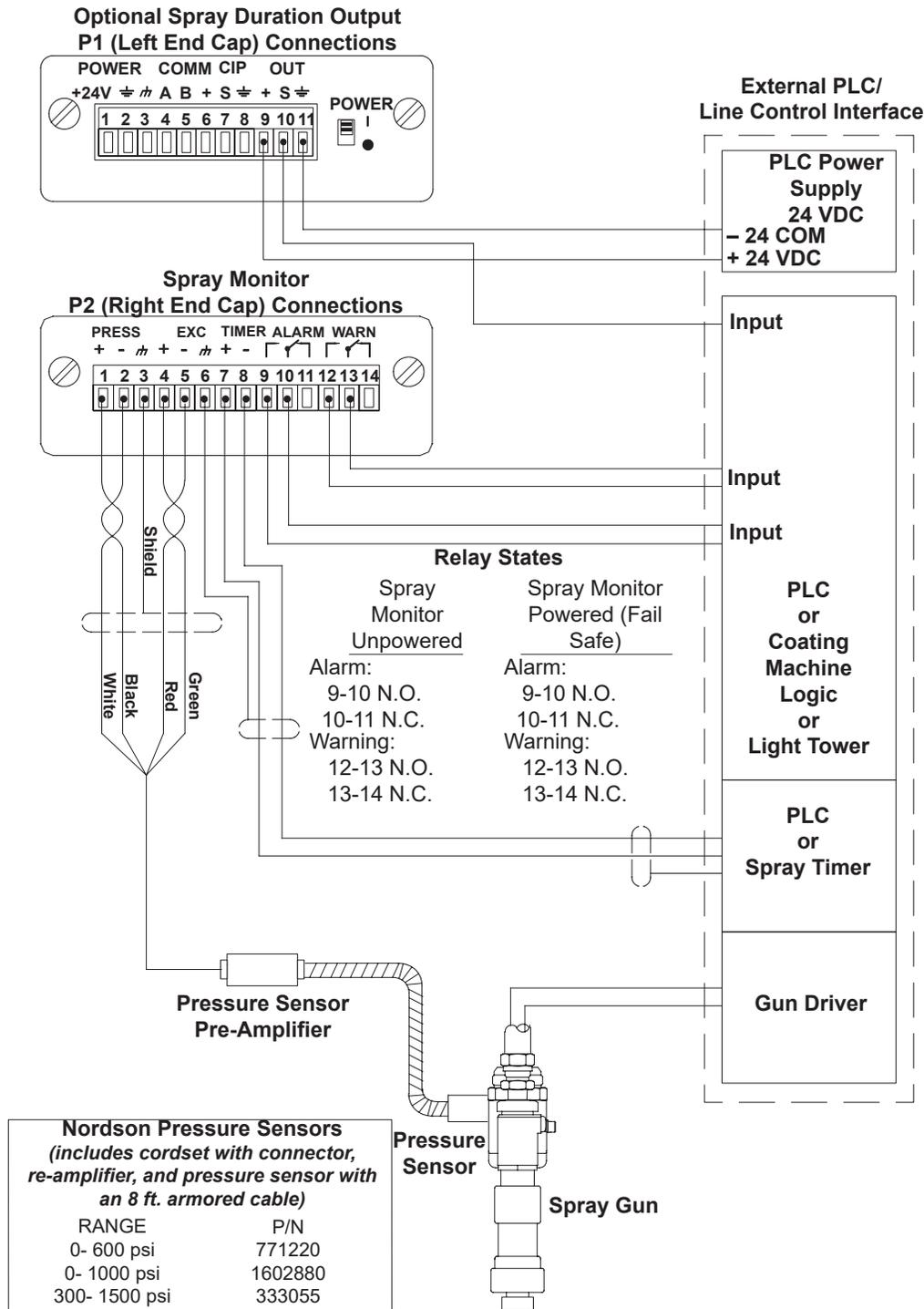


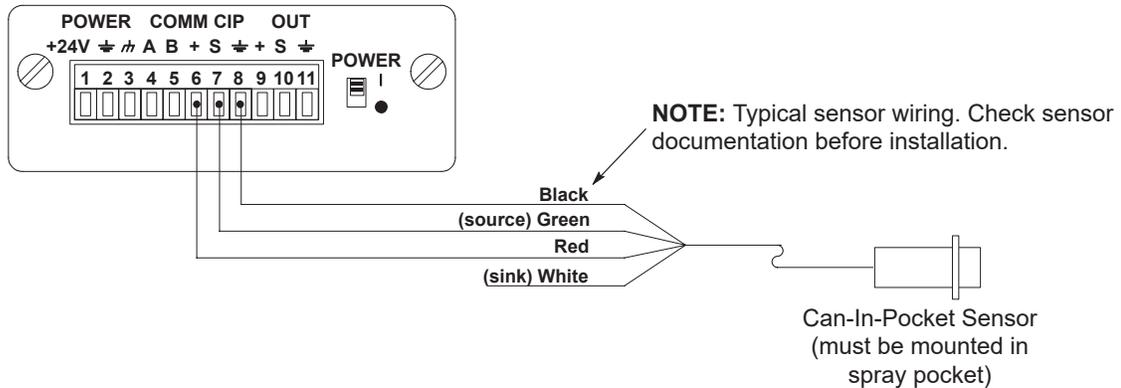
Figure 7 Network and Power Connections to Remaining Spray Monitors on Network

Optional Can-In-Pocket Sensor Wiring

The Can-In-Pocket sensor and cable are not included with the Spray Monitor. Contact your Nordson representative for more information.

NOTE: The following wiring diagrams show sourcing operation. If your system will be using a sinking sensor signal, connect the sink (white) wire in place of the source (green) wire and change the J3 jumper as described in Figure 3. Do not connect the wire that is not used.

One Spray Gun in One Spray Pocket



Two Spray Gun in One Spray Pocket

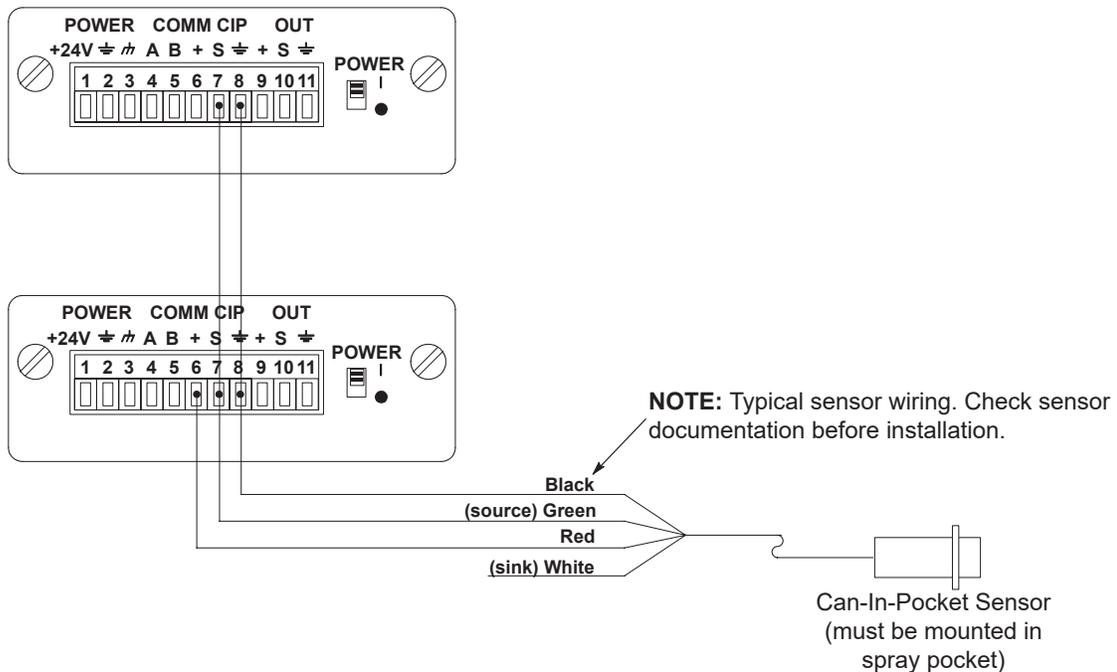


Figure 8 Optional Can-In-Pocket Sensor Wiring

Optional iTrax 24V Trigger Board Installation

See Figure 14 for installing the Trigger Board.

1. Remove both terminal block connectors (4 and 7) from the sides of the Spray Monitor.
2. Remove the flat head screw (3).
3. Remove the left side end plate (5).
4. Slide the PCA board (2) from the housing (1).
5. Locate J102 trigger header and remove the 3 jumpers.
6. Orient the Trigger Board so the components are one the same side as the J102 label on the PCA. Plug the Trigger Board into J102.
7. Slide the PCA back into the housing and reassemble the Spray Monitor.

Calibration



CAUTION: The coating system must be operating properly before you perform a calibration. If the coating system is not operating properly when you calibrate, the Operator Interface will allow the coating system to operate poorly and will generate inaccurate faults.

The Spray Monitor modules must be calibrated before you put the iTrax Spray Control System into regular operation or enable any faults or relays through the Operator Interface.

Calibration collects operating data to use as an operational baseline. Each time a product is coated during normal operation, the actual base, fire, and delta pressures are compared to the calibrated (baseline) pressures. If the actual pressures are outside of permissible ranges around the calibrated pressures, a fault occurs.

NOTE: Refer to the *iTrax Spray Monitor System Operator Interface* user's guide provided with the software for a detailed description of the Operator Interface functions and icons.

Open the Operator Interface's online Help system by selecting **Display Help** from the main button bar. Refer to Calibration in the Operation section of the online Help system for detailed instructions for performing a calibration.

Operation

iTrax System operation is automatic once the Spray Monitors are calibrated and the system is configured to the desired level of process monitoring through the Operator Interface. The Operator Interface displays system operation, provides warnings and alarms, and allows the operator to record responses to warnings and alarms.

Power Switch

The Spray Monitor has a power switch on the left end plate. This switch is turned on by default and should be left on. Use this switch to turn off power before disconnecting the left and right terminal block connectors.



WARNING: Turn off external power to the power supply before disconnecting power wires from either terminal block connectors. Failure to do so could result in an electrical shock.

LED Indicators

The Spray Monitor has 4 LEDs on the front panel:

LED	Color	Function
 POWER	Green	Power to Spray Monitor is on.
 TRIGGER	Green	Timer signal is being received.
	Yellow	Can-In-Pocket sensor signal is being received. NOTE: Can-In-Pocket is an optional function that is set up through the Operator Interface. Contact your Nordson representative for more information.
 WARNING	Yellow	Warning condition exists. Refer to the iTrax Operator Interface online help system for troubleshooting procedures.
 WARNING	Red	Alarm condition exists. Refer to the iTrax Operator Interface online help system for troubleshooting procedures.

Firmware Updates

NOTE: When installing a new CANproUSB, refer to *iTrax Software Installation Manual 1606827*.

Version Compatibility

NOTE: All new iTrax Spray Monitor modules are shipped from Nordson with firmware version 4.8 respectively as the default to maximize compatibility with iTrax software versions.

Module	Firmware Version	Module Number	iTrax Version 5.4 and earlier	iTrax Version 5.6 and later	Notes
SM Module	5.20 and later	1065268	NO	YES	A
SM Module	4.8 and earlier	1065268	YES	YES	A

NOTE: A. The firmware update for the SM Module is located on the USB flash drive for the iTrax Version 5.6 software. Existing installed modules and newly purchased modules can be updated via the iTrax touch screen PC. Please follow the directions in *Reprogramming the iTrax Spray Control Modules* section.

Copying the Flash Drive Files

NOTE: Before installing iTrax firmware and software, copy the programs from the blue flash drive onto the computer. The flash drive contains all of the software needed to operate the iTrax system and modules.

1. Create a folder in the C:\ Drive of the iTrax PC.
2. See Figure 9. Name the folder iTrax Blue Flash Drive.

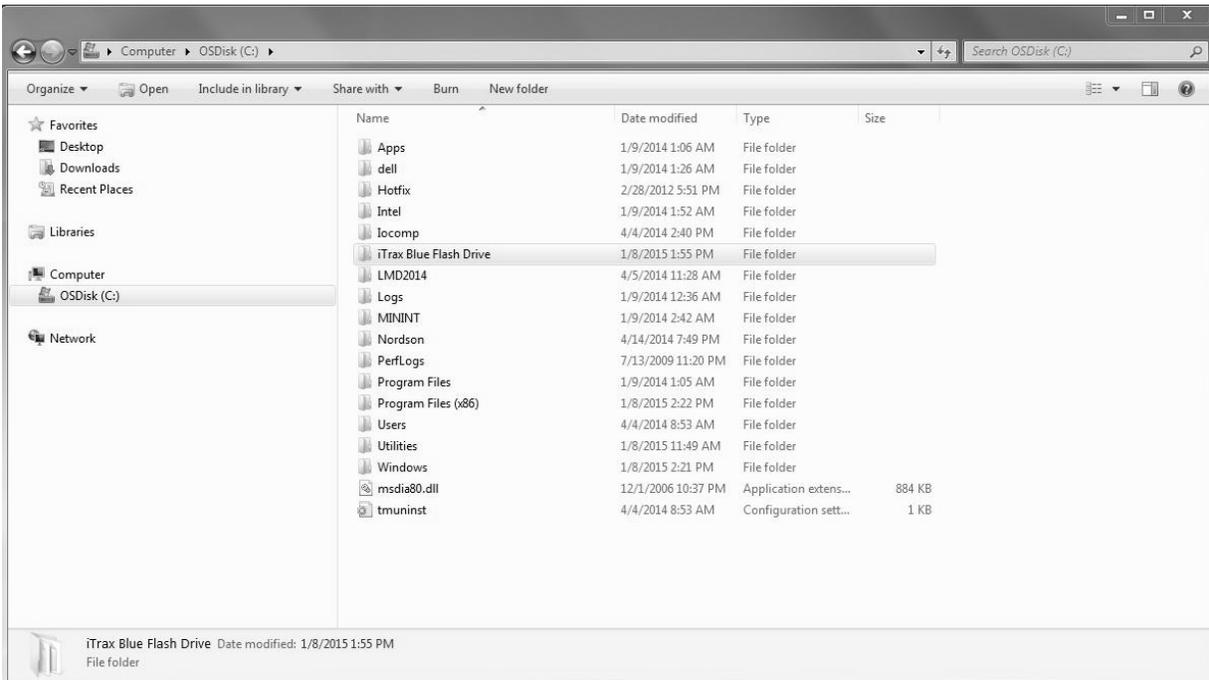


Figure 9 Creating the iTrax Blue Flash Drive Folder

3. Plug in the flash drive in the USB drive and open the file.
4. Copy all files from the flash drive folder to the iTrax Blue Flash Drive folder.
5. See Figure 10. Verify that the contents of the newly created folder match those from the flash drive.

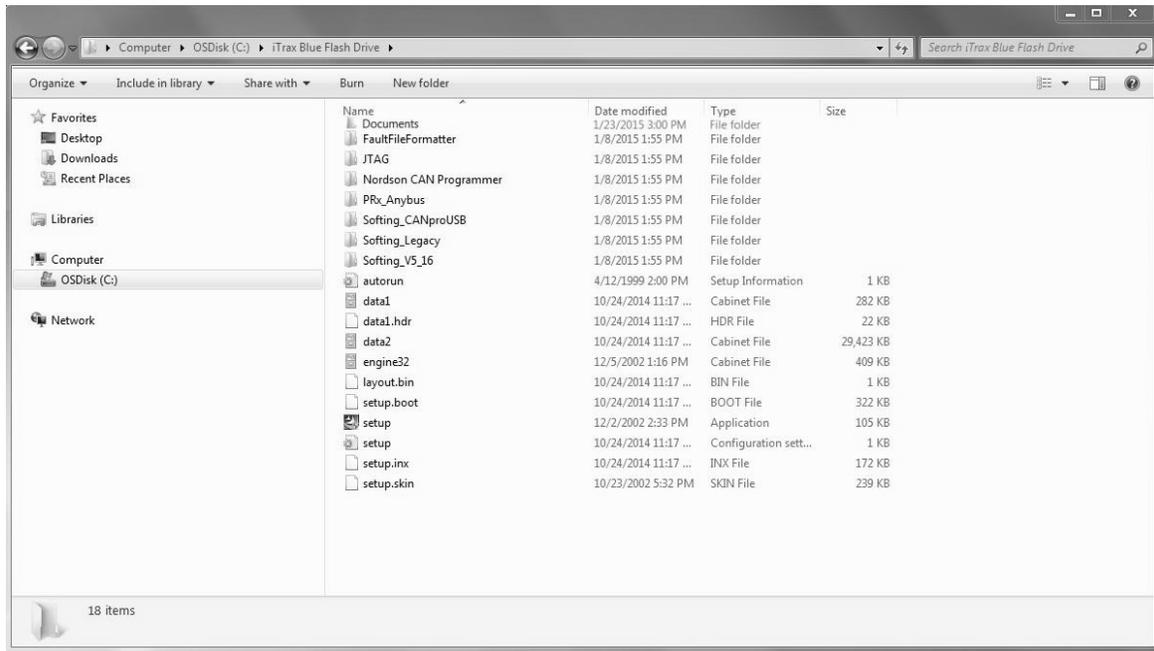


Figure 10 Contents of Blue Flash Drive

Reprogramming the iTrax Spray Control Modules

Before performing procedure:

- Verify that the *Nordson CAN Programmer* application is loaded on the iTrax PC.
- Plan for a halt in production. The iTrax modules cannot be reprogrammed while they are running in production. Reprogramming iTrax modules should take no more than a few minutes.

Shutting Down the iTrax Software and Server Applications

1. Before starting the CAN Programmer, first close the *CanWorks iTrax Operator Interface*.

NOTE: The *CanWorks iTrax Operator Interface* may take several seconds to close.

2. Once the operator interface is closed, close the *CanWorks OPC Server*.
3. See Figure 11. Verify that there are no active iTrax application icons on the taskbar.
4. See Figure 12. The *Nordson CAN Programmer* icon should appear on the desktop.

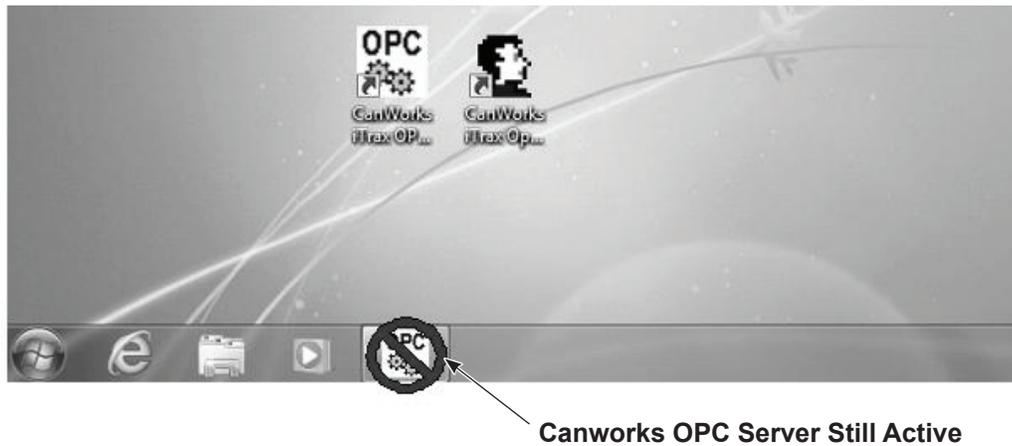


Figure 11 CanWorks OPC Server Showing Active on Taskbar



Figure 12 Nordson CAN Programmer Icon

Programming the Module

See to Figure 13.

1. If the iTrax modules are OFF, power the modules ON. If the iTrax modules are ON, cycle the power OFF and back ON.
 2. Select the Nordson CAN Programmer on the iTrax PC Desktop to open the CAN Programmer main screen.
 3. See Figure 13. Select iTrax Monitor from the list box (6). Once selected, the module address listing (7) will show selections for the iTrax monitor.
 4. Navigate to C:\JTAG\iTraxSM (2) folder.
 5. Select the S-record file iTrax0520.S (1) and the file name appears in the location field (3).
 6. Select the All at once (broadcast) button (5) to allow all programs selected to update simultaneously.
 7. Select the modules to be updated in the module address listing (7).
- NOTE:** If selecting all modules, use the All button (9) to quickly select all the listings.
8. Select the Prog button (8) at the bottom of the screen. Reprogramming the module should take about 1 minute. A progress bar will display indicating progress.
 9. After programming is complete, select OK and exit the programmer.
 10. Cycle 24 VDC power to all of the iTrax Modules . Cycling ensures that all iTrax modules are rebooted and running the new code.
 11. Restart the iTrax Operator Interface and the iTrax OPC Server application on the PC.
 12. The information function on the iTrax operator interface can be used to verify that the reprogrammed module is configured correctly.

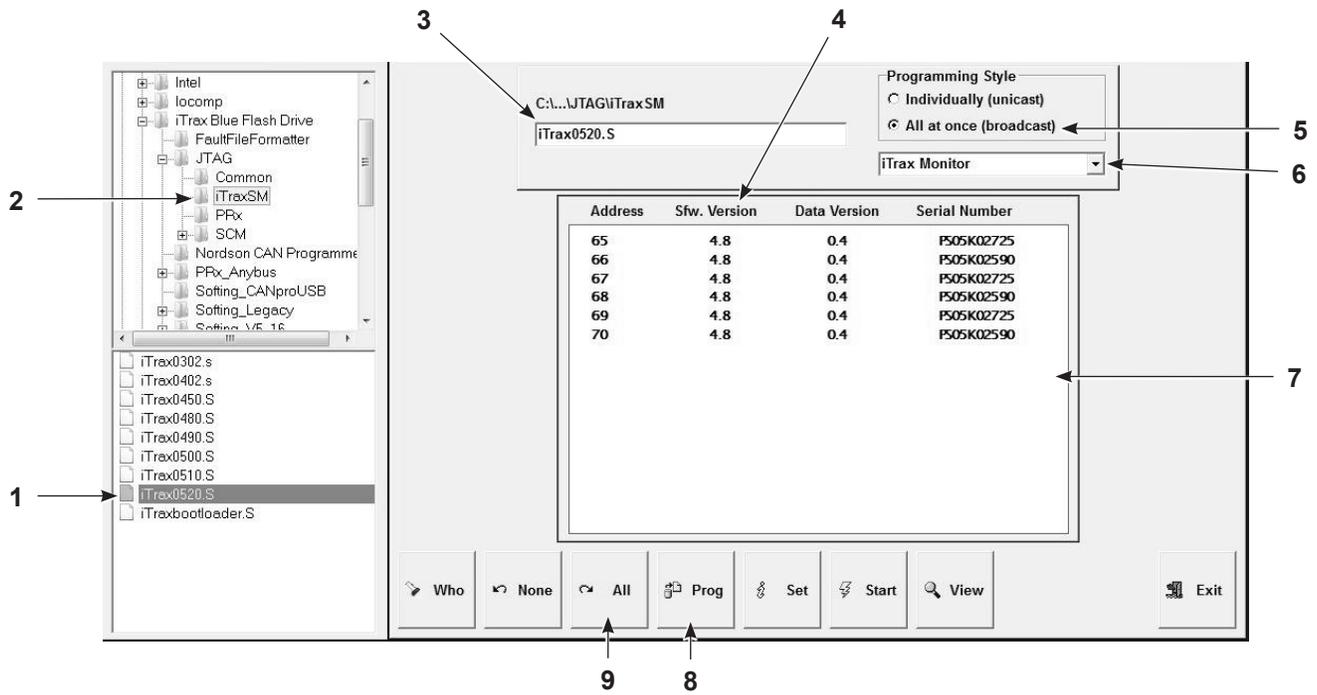


Figure 13 CAN Programmer Main Screen

- 1. iTrax0520.S file
- 2. iTraxSM folder
- 3. iTrax0520.S location field
- 4. Software version
- 5. All at once option
- 6. Module listing
- 7. Module address listing
- 8. Program button
- 9. Select all button

Parts

To order parts, call the Nordson Finishing Customer Support Center at (800) 433-9319 or contact your local Nordson representative.

Using the Illustrated Parts List

Numbers in the Item column correspond to numbers that identify parts in illustrations following each parts list. The code NS (not shown) indicates that a listed part is not illustrated. A dash (—) is used when the part number applies to all parts in the illustration.

The number in the Part column is the Nordson Corporation part number. A series of dashes in this column () means the part cannot be ordered separately.

The Description column gives the part name, as well as its dimensions and other characteristics when appropriate. Indentions show the relationships between assemblies, subassemblies, and parts.

- If you order the assembly, items 1 and 2 will be included.
- If you order item 1, item 2 will be included.
- If you order item 2, you will receive item 2 only.

The number in the Quantity column is the quantity required per unit, assembly, or subassembly. The code AR (As Required) is used if the part number is a bulk item ordered in quantities or if the quantity per assembly depends on the product version or model.

Letters in the Note column refer to notes at the end of each parts list. Notes contain important information about usage and ordering. Special attention should be given to notes.

Item	Part	Part	Part	Description	Quantity	Note
—	-----	—	—		—	
1	-----					
2						

Continued...

NOTE: A.
B.

NS: Not Shown

AR: As Required

Spray Monitor Parts

Item	Part	Description	Quantity	Note
—	1065268	MODULE, Spray Monitor, iTrax	1	
1	-----	• HOUSING, modular, machined	1	
2	-----	• PCA, Spray Monitor, iTrax	1	
3	981637	• SCREW, flat head, #6-32 x 0.437, slotted, zinc	1	
4	1065232	• TERMINAL block connector, P1, 11 position, 5.08 mm, MSTB, black	1	
5	-----	• PLATE, end cap, 11 position, iTrax	1	
6	-----	• PLATE, end cap, 14 position, iTrax	1	
7	1042664	• TERMINAL block connector, P2, 14 position, 5.08 mm, MSTB, black	1	
8	326947	• MOUNTING CLIP, DIN, 35 mm rail	1	
9	982164	• SCREW, pan head, slotted, M4 x 6, zinc	3	
NS	183102	• RESISTOR, 121 ohm, 1%, 1/8 Watt	2	
10	1038812	TRIGGER BOARD, 24V, universal, iTrax	—	A
NS	1614722	OPC REMOTE CLIENT, iTrax	—	A
NS	1612117	OPC DATA LOGGER, iTrax	—	A
NS	1612377	CONTROLLER, Spray Controller, iTrax	—	A
NS	1107573	CONTROL, module, iTrax Prx- II	—	A

NOTE: A. Optional part available through Nordson.

NS: Not Shown

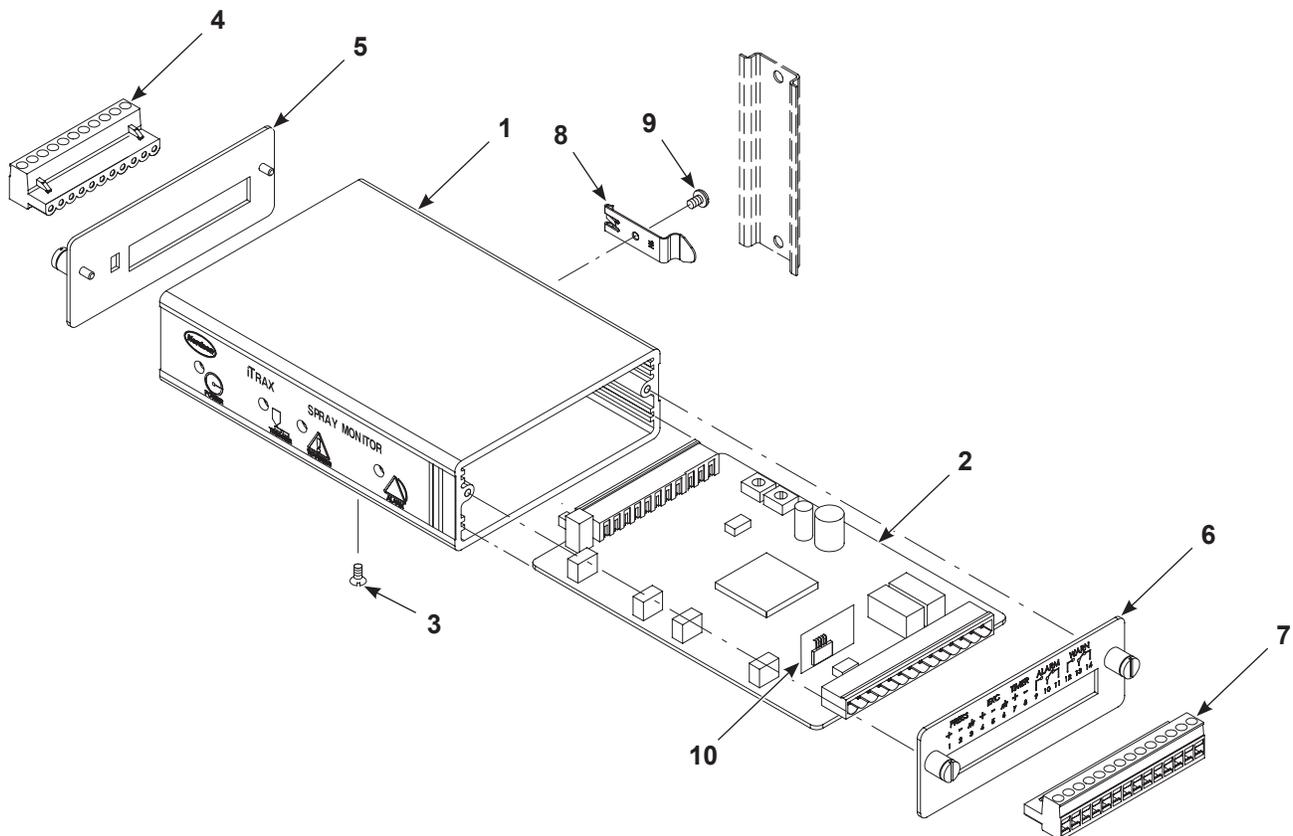


Figure 14 Spray Monitor Parts

EU DECLARATION of CONFORMITY

This Declaration is issued under the sole responsibility of the manufacture.

Product: iTrax Spray Monitor with Can-in-Place (CIP) for Container Product Line.

Description:

iTrax Spray Monitor is used for monitoring the operation of the can coating system and alerting of quality problems.

Applicable Directives:

2014/35/EU (Low Voltage Directive)

2014/30/EU (Electromagnetic Compatibility Directive)

Standards Used for Compliance:

EN60204 (2018)

EN55011 (2010)

ANSI/ISO 12100 (2010)

EN6100-6-2 (2005)

Principles:

This product has been manufactured according to good engineering practice.

The product specified conforms to the directive and standards described above.

DNV – ISO9001 Certified



Date: 13Jan2025

Jeremy Krone
Engineering Manager
Industrial Coating Systems
Amherst, Ohio, USA

Nordson Authorized Representative in the EU

Person authorized to compile the relevant technical documentation.

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D-40699 Erkrath



UK DECLARATION of CONFORMITY

This Declaration is issued under the sole responsibility of the manufacture.

Product: iTrax Spray Monitor with Can-in-Place (CIP) for Container Product Line.

Description:

iTrax Spray Monitor is used for monitoring the operation of the can coating system and alerting of quality problems.

Applicable UK Regulations:

Electrical Equipment (Safety) Regulations 2016.
Electromagnetic Compatibility Regulation 2016

Standards Used for Compliance:

EN60204 (2018) EN55011 (2010)
ANSI/ISO 12100 (2010) EN6100-6-2 (2005)

Principles:

This product has been manufactured according to good engineering practice.
The product specified conforms to the directive and standards described above.

DNV – ISO9001 Certified



Date: 13Jan2025

Jeremy Krone
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