



**INNOVATIVE AIR**  
TECHNOLOGIES

# UNIT FEATURES GUIDE

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[www.dehumidifiers.com](http://www.dehumidifiers.com)

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# LIFTING LUGS

- » Heavy-duty construction for reliable strength and durability
- » Dual-purpose design functions as both lifting and anchor points
- » Removable for flexibility during transport and installation
- » Secure anchoring during shipping and at final installation site
- » Simplifies handling and ensures safe unit placement
- » Compatible with rigging equipment for easy lifting and positioning



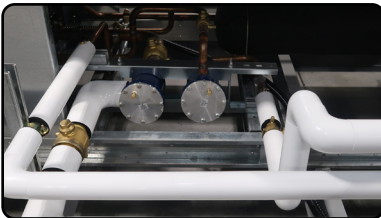
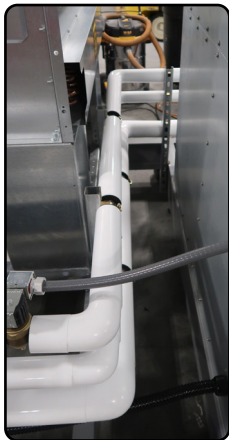
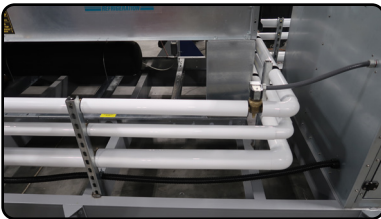




# REFRIGERATION PIPING

*All IDP Series units that include a refrigeration-based condenser or reheat coil system are factory piped, ensuring consistent quality and simplified installation.*

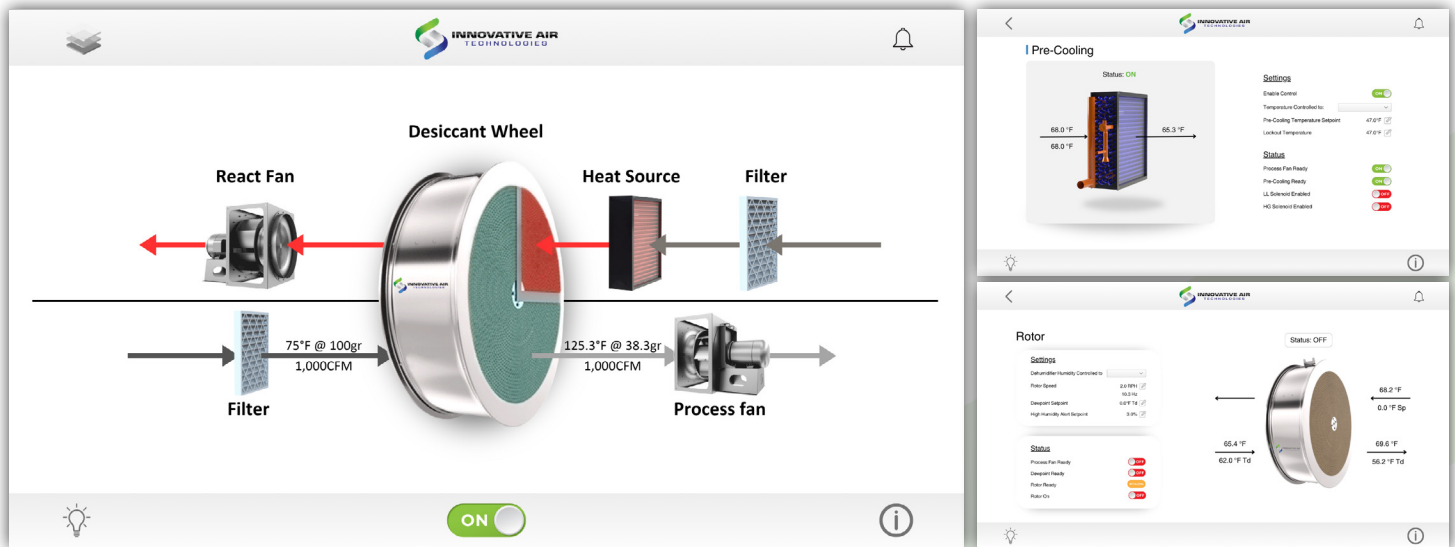
- » Reduces risk of field installation errors or refrigerant leaks
- » Speeds up installation with piping already completed at the factory
- » All piping is pressure-tested and quality checked before shipment
- » Professionally routed piping ensures clean, organized layout
- » Integrated design improves system performance and airflow







# USER-FRIENDLY TOUCHSCREENS



*Our touchscreen controls are designed for ease of use, quick diagnostics, and a clean user experience.*

- » Simplified navigation and menu structure
- » Reduces training time for operators and techs
- » Easy access to alarms and diagnostics
- » Clean, professional appearance
- » Customizable for specific site needs

# ELECTRICAL PANEL DESIGN

*Our electrical panels are laid out for clarity, safety, and serviceability.*



- » Easier troubleshooting and maintenance
- » Reduced chance of wiring errors
- » Panels built to NEC standards and beyond





# WIRE NUMBERING & COLORING SYSTEM

All wiring inside IAT units follows a standardized numbering and color scheme for easier identification.

- » Speeds up service and diagnostics
- » Reduces troubleshooting errors
- » Improves safety during electrical work
- » Conforms to best practices in industrial control systems

## TERMINAL WIRE COLOR CODE SHEET

		Single Stripe (Spiral)		
#	Wire Color	#	Wire Color	Single Stripe Color
1	red	11	red	white
2	white	12	white	Dark Green
3	yellow	13	yellow	white
4	tan	14	tan	white
5	blue	15	blue	white
6	purple	16	purple	white
7	brown	17	brown	white
8	orange	18	orange	white
9	gray	19	gray	white
10	pink	20	pink	white

## TERMINAL WIRE COLOR CODE SHEET

		Single Stripe (Spiral)			Single Stripe (Spiral)			Single Stripe (Spiral)			Single Stripe (Spiral)		
#	Wire Color	#	Wire Color	Single Stripe Color	#	Wire Color	Single Stripe Color	#	Wire Color	Single Stripe Color	#	Wire Color	Single Stripe Color
1	red	11	red	white	21	red	Black	31	white	red	61	Yellow	blue
2	white	12	white	Dark Green	22	white	Black	32	white	Light Green	62	Red	Light Green
3	yellow	13	yellow	white	23	yellow	Black	33	white	yellow	63	Red	yellow
4	tan	14	tan	white	24	tan	Black	34	white	tan	64	Red	tan
5	blue	15	blue	white	25	blue	Black	35	white	blue	65	Red	blue
6	purple	16	purple	white	26	purple	Black	36	white	purple	66	Red	purple
7	brown	17	brown	white	27	brown	Black	37	white	brown	67	Red	brown
8	orange	18	orange	white	28	orange	Black	38	white	orange	68	Red	orange
9	gray	19	gray	white	29	gray	Black	39	white	gray	69	Red	gray
10	pink	20	pink	white	30	pink	Black	40	white	pink	70	Red	pink

		Single Stripe (Spiral)			Single Stripe (Spiral)			Single Stripe (Spiral)		
#	Wire Color	#	Wire Color	Single Stripe Color	#	Wire Color	Single Stripe Color	#	Wire Color	Single Stripe Color
41	Black	41	Black	red	51	Gray	red	61	Yellow	blue
42	Black	42	Black	Light Green	52	Gray	Light Green	62	Red	Light Green
43	Black	43	Black	yellow	53	Gray	yellow	63	Red	yellow
44	Black	44	Black	tan	54	Gray	tan	64	Red	tan
45	Black	45	Black	blue	55	Gray	blue	65	Red	blue
46	Black	46	Black	purple	56	Gray	purple	66	Red	purple
47	Black	47	Black	brown	57	Gray	brown	67	Red	brown
48	Black	48	Black	orange	58	Gray	orange	68	Red	orange
49	Black	49	Black	gray	59	Gray	Dark Green	69	Red	gray
50	Black	50	Black	pink	60	Gray	pink	70	Red	pink

**USE COPPER 90°C  
24-10AWG  
FIELD WIRING  
TERMINALS TO BE  
TORQUED TO  
7 IN-L B**



# RUGGED BASE FRAMES

*All IAT units are built on heavy-duty base frames designed for strength, durability, and ease of handling.*



- » Maintains unit integrity over time
- » Built to withstand rigging, transport, and rough environments
- » Protects internal components from damage
- » Ideal for industrial and commercial applications







# HMI DISPLAY SHIELD

*Optional sunshade prevents glare and screen overheating on outdoor-mounted HMIs.*



- » Easier screen visibility in bright light
- » Protects electronics from solar heat gain
- » Improves operator usability outdoors
- » Enhances long-term durability of display



# CHAIN-DRIVEN ROTORS

*IAT uses chain drives to rotate desiccant wheels with high torque and consistent speed.*

- » **Reliable long-term operation**
- » **Easily maintained and replaced**
- » **Handles high torque loads without slippage**
- » **Built for harsh or continuous-duty applications**
- » **Unlike belt-driven systems, chains won't slip, break, or stretch over time and replacing a belt requires removing**

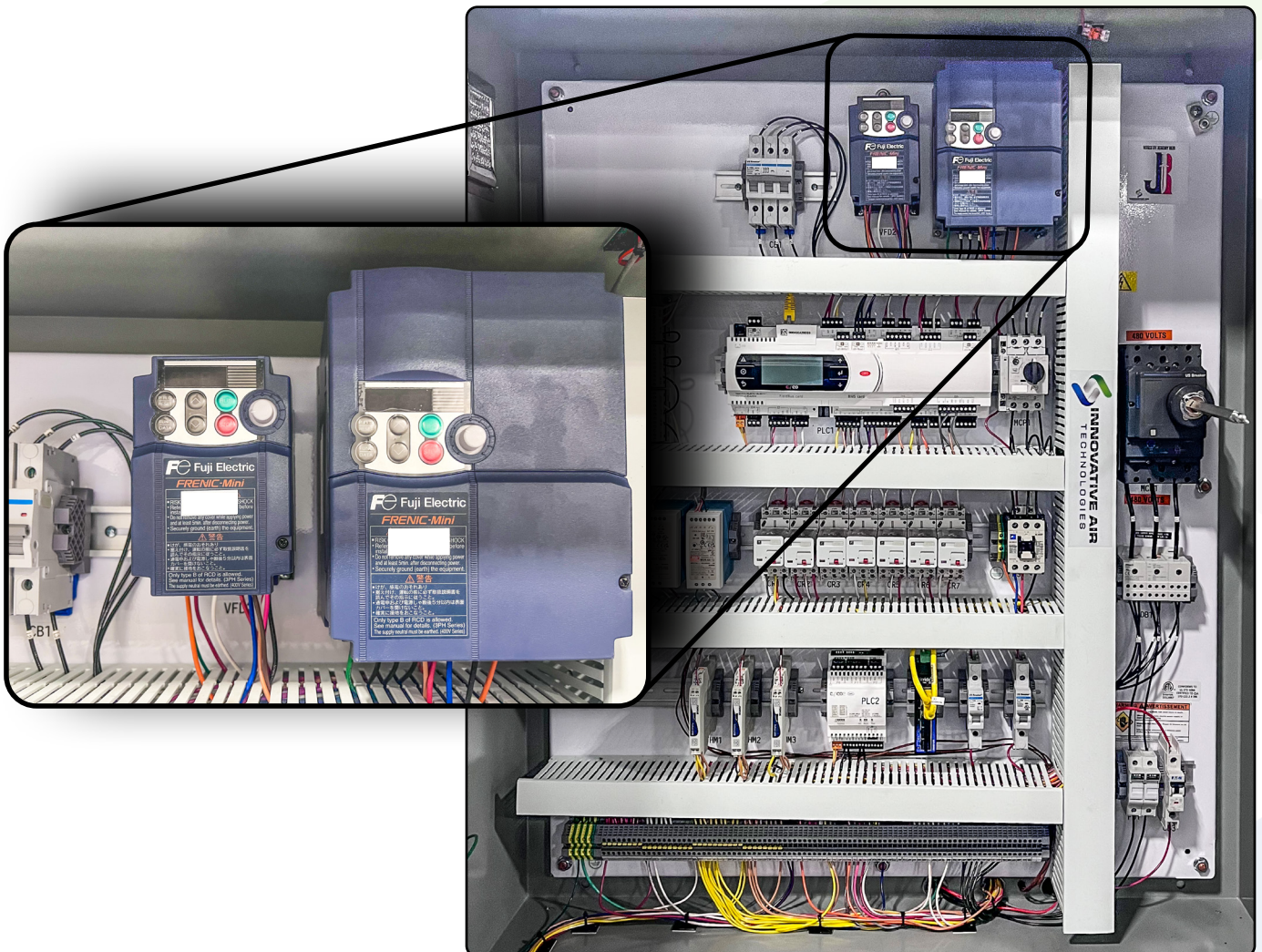




# VFDS ON ALL FANS

*All supply and process fans include VFDs as standard to allow for airflow modulation and energy efficiency.*

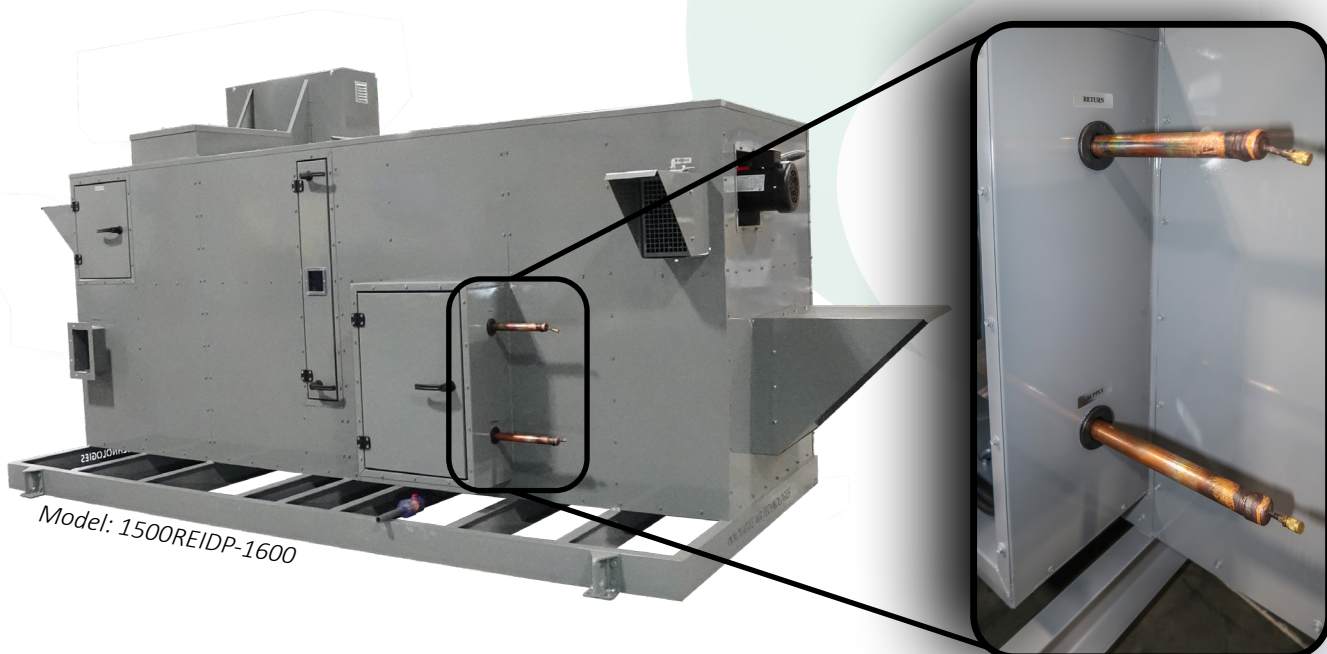
- » Energy savings through variable speed operation
- » Improved control over pressure and flow
- » Quieter operation at lower speeds
- » Allows for flexible commissioning and tuning



# CHILLED WATER STUBS

*When chilled water coils are selected, IAT can provide factory-piped and pre-wired control valves, along with chilled water stub-outs for fast field connection.*

- » Reduces field labor and installation time
- » Factory-installed components ensure consistent quality and performance
- » Stub-outs simplify connection to the field chilled water loop
- » Valves are correctly sized, installed, and wired for proper control
- » Helps ensure optimal temperature and humidity regulation from day one



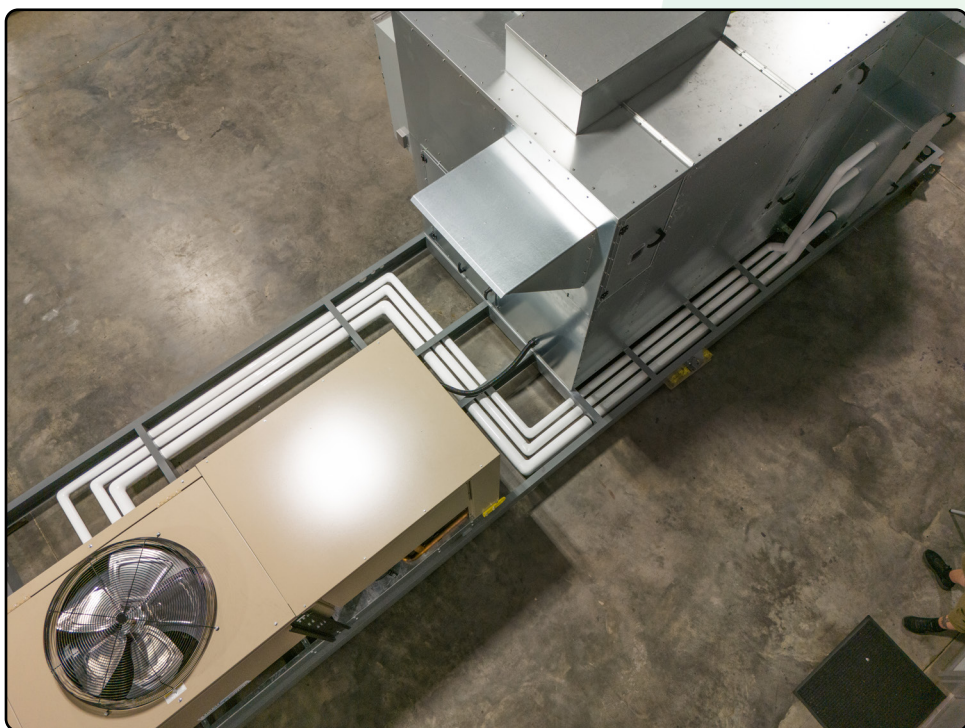
Model: 1500REIDP-1600



# INTEGRATED DX SYSTEMS

*IAT offers fully integrated DX (direct expansion) or chilled water systems within our dehumidifiers — a level of integration that most other manufacturers don't provide.*

- » **Complete system integration for optimized performance**
- » **Factory-charged and wired to reduce field labor**
- » **Fewer subcontractors required on-site**
- » **Improved quality control and reliability**
- » **Faster, smoother startup and commissioning**



# QUARTER-TURN HANDLES & QUICK ACCESS PANELS

*Access panels feature quarter-turn handles for tool-free entry, speeding up service time and routine maintenance.*

- » No tools required for common access points
- » Faster inspections and filter changes
- » Encourages regular maintenance
- » Helps reduce labor time and costs





# COIL & DRAIN PAN DESIGN

*Our cooling coils and drain pans are designed for efficient moisture removal and easy drainage.*

- » Reduced risk of microbial growth
- » Sloped pans for full drainage
- » Corrosion-resistant materials for long life
- » Enhanced coil performance and airflow



# LED SERVICE LIGHTS

*Optional internal LED lighting improves visibility for technicians during service or inspection.*

- » Safer working conditions in low-light spaces
- » Easier identification of components
- » Reduced need for external lighting tools

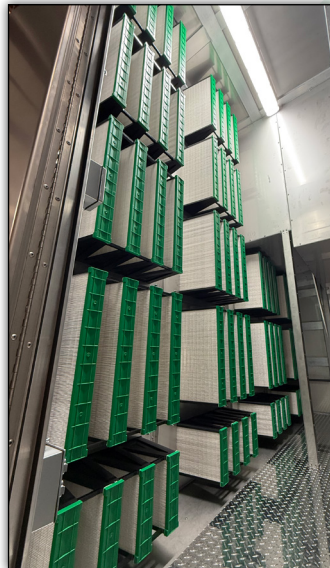
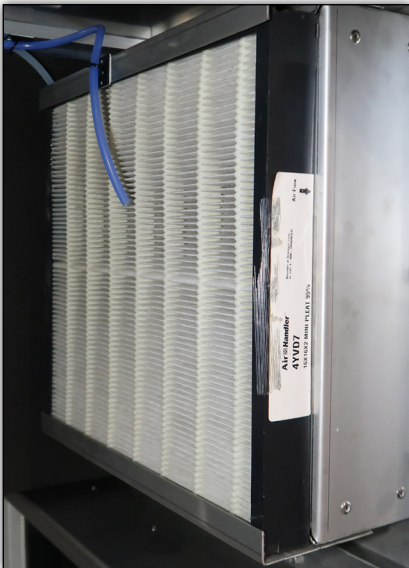




# FILTER OPTIONS & DESIGNS

*IAT offers a variety of filtration levels, including MERV-rated filters, pre-filters, and HEPA options.*

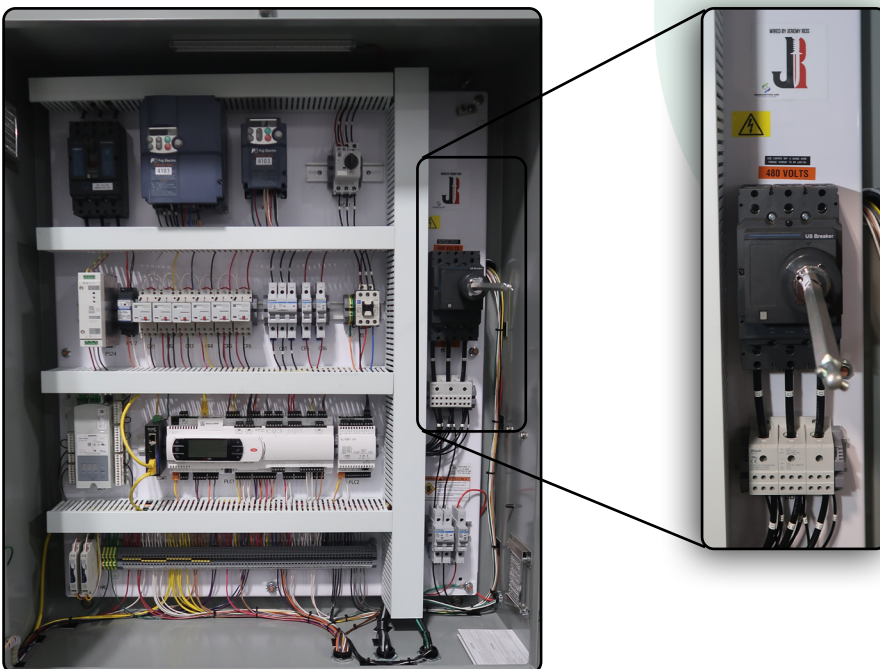
- » **Protects internal components from airborne particles**
- » **Improves indoor air quality**
- » **Easily accessible for replacement**
- » **Multiple configurations to meet space and spec requirements**



# SINGLE-POINT POWER CONNECTION

*Units are designed to accept a single electrical feed, streamlining field installation.*

- » Faster electrical hookup
- » Cleaner and safer panel connections
- » Reduces installation errors

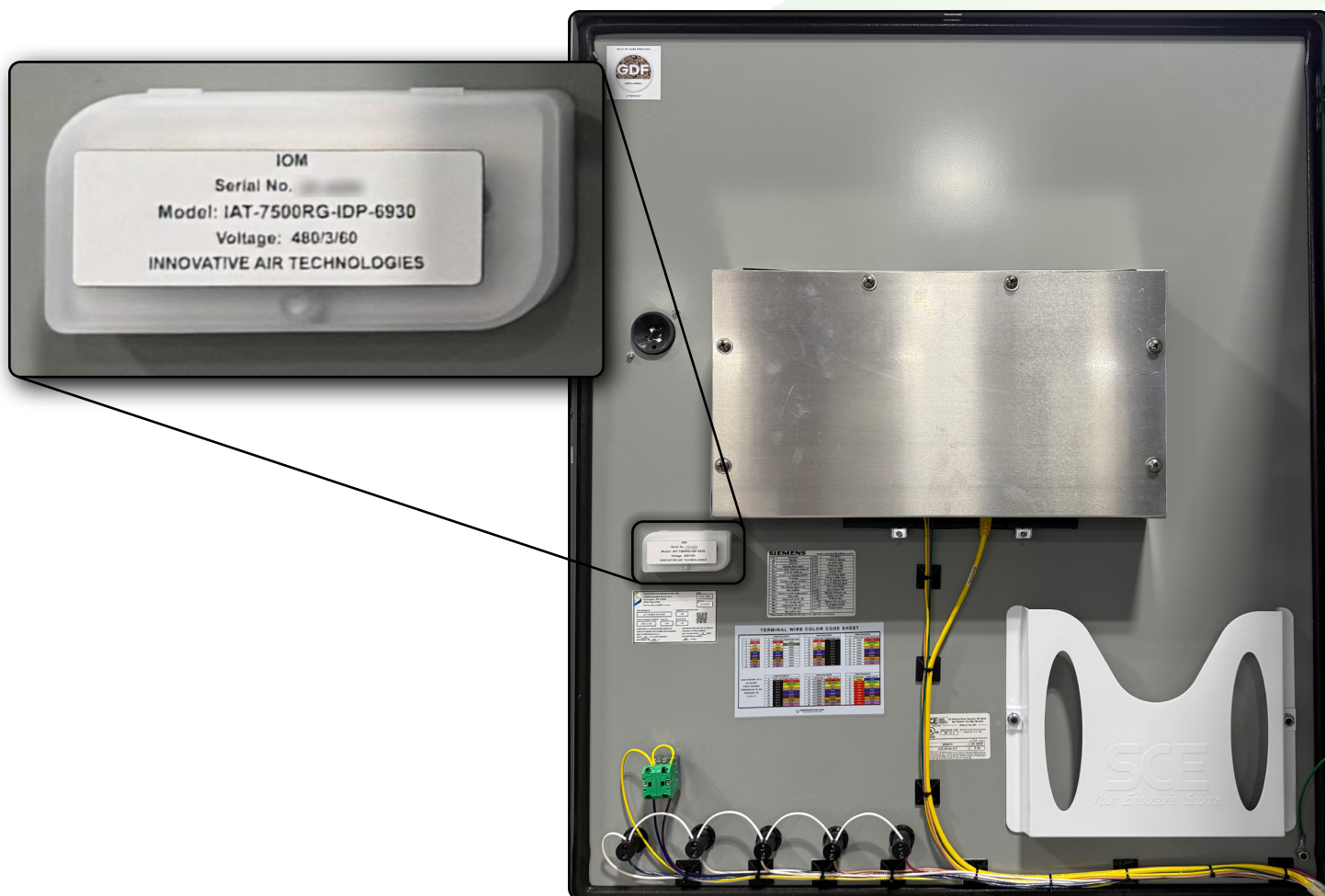




# IOM THUMB DRIVE

*Each unit ships with a USB drive containing all relevant Installation, Operation, and Maintenance (IOM) documentation.*

- » Easy access to up-to-date manuals and drawings
- » No need to search for hard copies or outdated versions
- » Convenient for commissioning and service techs
- » Helps maintain compliance and documentation records





# QR CODE FOR WARRANTY & SUPPORT

*Every IAT unit includes a QR code linked to digital resources like warranty registration, service contacts, and manuals.*

- » Instant access to documentation and support
- » Easy warranty registration
- » Reduces lost paperwork or miscommunication
- » Empowers facility teams and service contractors





# MATERIAL OPTIONS

*Choose from galvanized, galvanized, stainless steel, or aluminum based on the application and environment.*

1. **Galvanized:** cost-effective and corrosion resistant
2. **Galvanized:** ideal for painted units (paint adhesion)
3. **Aluminum:** lightweight and corrosion-resistant with coating options
4. **Stainless Steel:** excellent for corrosive environments

