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IT7000 Series HMI

Selection Guide

Industrial Automation | New Energy Vehicle | Intelligent Elevator | Intelligent Robot | Digital Energy | Rail Transit

Data code PS00002787B03

Legal Information

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Due to continuous updates and improvements of products and technologies, the content of this documentation may not fully match the actual products. In the event of any discrepancies, the actual products shall prevail.

The contents are subject to change without notice due to product upgrade.

Waste Disposal

The storage, use, and disposal of this product (including optional accessories) must comply with local laws and regulations.

Qualified Personnel

The product/system described in this documentation may be operated only by personnel qualified for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel can identify the risks of the product/system and prevent possible dangers.

Proper Use of the Product

Proper transportation, storage, assembly, installation, commissioning, operation, and maintenance are required to ensure the safe operation of the product without any problems. The required ambient conditions must be met. All operations must follow the guidelines provided in this documentation.

Preface

Introduction

The IT7000 series HMI adopts high-performance processor for high-speed data processing and response. With an Android style Linux system, the product provides user-friendly interactive experience. It features: Custom styles, VNC remote desktop, vector format icons, and scripting; Connection to a PC through USB or Ethernet; Automatic and efficient PLC communication with Modbus protocol; Firmware, screen program and recipe data update through a USB drive. Additionally, the programming software of this product offers both offline and online simulation, facilitating HMI program debugging and system commissioning.

This guide describes the product model selection, including model, dimensions, specifications, and accessories.

Note

- The drawings in the user guide are shown for illustration only and may be different from the product. Actual products may vary.
- The user guide is subject to change due to product upgrade, specification modification as well as efforts to improve the accuracy and convenience of the guide.

More documents

Document	Code	Description
IT7150E HMI User Guide	19011415	Describes the technical specifications, installation dimensions, installation method, and startup and commissioning procedures for the IT7000 series 15-inch products.
IT7043 HMI User Guide	PS00003449	Describes the technical specifications, installation dimensions, installation method, and startup and commissioning procedures for the IT7000 series 4.3-inch products.
IT7100 HMI User Guide	19011193	Introduces the technical specifications, installation dimensions, installation method, and commissioning of IT7000 series 10-inch products.
IT7070 HMI User Guide	19011194	Describes the technical specifications, installation dimensions, installation method, and startup and commissioning procedures for the IT7000 series 7-inch products.
IT7000 Series HMI Application Cases	PS00003206	Describes application examples for InoTouchPad, including project management, controls, alarms, communication, variables, reports, script functions, and recipes, and guides users to customize project configurations.
IT7000 Series HMI Quick Start	PS00002905	Describes the quick commissioning and quick start for the product.
InoTouchPad Help Guide	PS00002706	Provides detailed information on the InoTouchPad configuration software, including installation, quick start, controls, project configuration, and functional applications.

Document	Code	Description
IT7000 Series HMI User Guide	PS00005849	Describes the specifications, installation dimensions, and terminal assignment of the IT7000 series products.
IT7000 Series HMI Selection Guide (This guide)	PS00002787	Describes technical specifications and dimensions of the product, as well as the detailed specifications and selection of optional accessories (such as mounting brackets and cables).

Revision History

Date	Version	Revision
July 2026	B03	Made minor corrections.
December 2025	B02	Made minor corrections.
September 2025	B01	Made minor corrections.
March 2025	B00	• Added descriptions of the IT7150P model. • Updated *"2.1 Model Number" on page 12*. • Updated *"3.2 Hardware Interface" on page 15*. • *"4.2 Power Supply Terminal and Snap-fit Joint" on page 22*Added descriptions of accessories in
October 2024	A02	• Updated *"3.2 Hardware Interface" on page 15*. • Updated the Suzhou address and added the My Inovance QR code on the cover page.
December 2023	A01	Added descriptions of the IT7043T-F01 and IT7043E-F01 models.
July 2021	A00	Initial release.

Access to the guide

This guide is not delivered with the product. You can download the PDF version in the following ways:

- Visit **https://www.inovance.com/global**, and choose Service&Support > Support > Documentation Download.
- Scan the **QR code** on the product with your smartphone.
- Scan the QR code below to install the **My Inovance** app, where you can search for and download the guide.

Warranty disclaimer

Inovance provides warranty service within the warranty period (as specified in your order) for any fault or damage that is not caused by improper operation of the user. Maintenance will be charged after the warranty expires.

Even within the warranty period, maintenance can be charged for the following product damage:

- Damage caused by operations not following the instructions in the guide
- Damage caused by fire, flood, or abnormal voltage
- Damage caused by using the product for unintended functions
- Damage caused by using the product outside the specified scope
- Damage or secondary damage caused by force majeure (natural disaster, earthquake, and lightning strike)

When applicable, relevant maintenance fee will be charged according to the latest Price List of Inovance. If otherwise agreed upon, the agreed terms and conditions shall prevail.

For details, see the Warranty Card.

Table of Contents

Legal Information 1
Preface 1
1 Fundamental Safety Instructions 5
1.1 General Safety Instructions 5
1.2 Industrial Information Security 10
2 Model 12
2.1 Model Number 12
2.2 Model 12
2.3 Appearance 13
3 Product Specifications 15
3.1 Screen and Processor 15
3.2 Hardware Interface 15
3.3 Mechanical Characteristics 16
3.4 Environment Specifications 17
3.5 Dimensions 18
4 Accessory 20
4.1 Program Download and Communication Cable 20
4.2 Power Supply Terminal and Snap-fit Joint 22
Service and Support 23

1 Fundamental Safety Instructions

1.1 General Safety Instructions

Safety disclaimer

1. Read and comply with the safety instructions during installation, operation, and maintenance of the product.
2. To ensure personal and equipment safety, observe all safety precautions marked on the product and described in this guide during installation, operation, and maintenance.
3. The "CAUTION", "WARNING", and "DANGER" are only supplements to the safety instructions.
4. Use this product according to the designated environment requirements. Damage caused by improper use is not covered by warranty.
5. Inovance shall take no responsibility for any personal injury or property damage caused by improper use.

Safety levels and definitions

DANGER	The "DANGER" sign indicates that failure to comply with the notice will result in death or serious injury.
WARNING	The "WARNING" sign indicates that failure to comply with the notice could result in death or serious injury.
Caution	The "CAUTION" sign indicates that failure to comply with the notice could result in minor or moderate injury, or equipment damage.

Unpacking
WARNING • Do not install the product in the case of any damage, rust, or signs of use on the product or accessories upon unpacking. • Do not install the product in the case of water seepage into the product or missing or damaged components upon unpacking. • Do not install the product in the case of any discrepancy between the product you received and the product name on the packing list.
Caution • Check whether the packing is intact and whether there is damage, water seepage, dampness, and deformation before unpacking. • Unpack the package by following the unpacking sequence. Do not strike the package violently. • Check for damage, rust, or dents on the surfaces of the product and accessories upon unpacking. • After unpacking, check the contents against the packing list to ensure that the equipment and accessories are in the correct quantities, and that all documentation is complete.

Storage and transportation

WARNING

- Large or heavy equipment must be handled by qualified professionals using specialized hoisting equipment. Failure to comply could result in personal injury or equipment damage.
- Before hoisting the equipment, ensure that components such as the front cover and terminal blocks are secured firmly with screws. Loosely connected components may fall off and result in personal injury or equipment damage.
- Do not stand or stay below the product which is being hoisted.
- When hoisting the equipment with a steel rope, ensure the equipment is hoisted at a constant speed without suffering from vibration or shock. Do not turn the equipment over or let the equipment stay hanging in the air. Failure to comply could result in personal injury or equipment damage.

Caution

- Handle the equipment with care and mind your step during transportation to prevent personal injury or equipment damage.
- When carrying the equipment with bare hands, hold the equipment casing firmly with care to prevent parts from falling. Failure to comply could result in personal injury.
- Store and transport the equipment based on the storage and transportation requirements. Failure to comply could result in equipment damage.
- Do not store or transport the equipment in locations where the equipment may be exposed to splashing water or rain, direct sunlight, strong electric field, strong magnetic field, or strong vibration.
- Store the equipment for up to three months. Take stricter protective measures and carry out the necessary inspections for a longer storage time.
- Pack the equipment securely and properly before transportation. Use a fully enclosed container for long-distance transportation.
- Never transport the equipment with other devices or items that could impact or cause harm to the equipment.

Design

DANGER

- Design a safety circuit and add an error handling program in the software to ensure the product remains in a safe state upon external power failure or product faults.
- If a sustained overcurrent occurs due to overload or load short circuit, the product may smoke or catch fire. An external safety device (such as a fuse or circuit breaker) must be installed.

WARNING

- If an output component (such as a relay or transistor) in this product is damaged, the corresponding output may become uncontrolled and remain permanently ON or OFF.
- The product design must comply with the overvoltage category requirements specified in the environmental specifications. A system-level lightning protection device must be installed on the power supply to ensure that lightning-induced overvoltages do not reach the product's power input, signal input, or control output terminals, thereby preventing damage to the product.
- Ensure that appropriate actions have been taken to prevent product malfunction caused by a communication fault between the product and related devices. Failure to comply could cause personal injury or equipment damage.

Caution

Switches that could cause personal injury or equipment damage must not be configured on the touch screen. Use independent switches for performing critical operations. Failure to comply could result in accidents caused by wrong outputs or faults.

Installation

DANGER

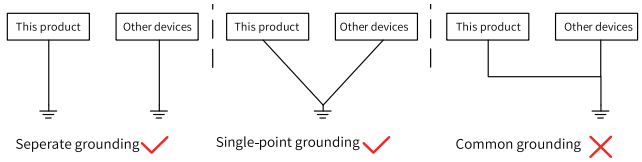
This equipment must be operated only by trained and qualified electrical personnel. Non-professionals must not operate this equipment.

Installation
WARNING • Read through the guide and safety instructions before installation. • Do not install this equipment in places with strong electric or magnetic field. • Before installation, check that the mechanical strength of the installation site can bear the weight of the equipment. Failure to comply will result in mechanical hazards. • Before installation, ensure that the installation site meets the required environmental conditions. Failure to comply could result in equipment damage. • Do not wear loose clothes or accessories during installation. Failure to comply could result in electric shock. • When installing the equipment in an enclosed environment (such as a cabinet or case), use cooling devices (such as fans or air conditioners) to cool the space and meet the installation environment requirements. Failure to do so can result in equipment overtemperature or fire accidents. • Do not retrofit the equipment. • Never loosen or turn the fixing bolts on product components, or any bolts marked in red. • This equipment must be installed inside an indoor cabinet or terminal equipment. The cabinet or terminal equipment itself must be provided with the necessary protective enclosures, such as a fireproof enclosure, an electrical protective enclosure, and a mechanical protective enclosure. The IP rating of these enclosures must comply with the relevant IEC standards, and applicable local laws and regulations. • Before installing devices with strong electromagnetic interference, such as a transformer, install a shielding device for the equipment to prevent malfunction. • Install the equipment onto a non-combustible object such as metal. Keep the equipment away from combustible objects. Failure to comply could result in fire. • For products not supporting hot swapping, disconnect all external power supplies of the system before installing/removing the product. Failure to comply could result in electric shock, product failure, or malfunction.
Caution • Cover the top of the equipment with a piece of cloth or paper during installation. This is to prevent unwanted objects such as metal chippings, oil, and water from falling into the product and causing faults. After installation, remove the cloth or paper on the top of the equipment to prevent the ventilation holes from being blocked, which could cause overheating due to poor heat dissipation. • During installation, ensure the equipment is connected to the respective connector securely and hook the equipment firmly. Improper installation may result in malfunction, failure, or detachment.

Wiring

DANGER

- This equipment must be operated only by trained and qualified electrical personnel. Non-professionals must not operate this equipment.
- Before wiring, disconnect all the power supplies of the equipment. Wait for at least the time designated on the warning label before further operations because residual voltage still exists after power-off. After waiting for the designated time, measure the DC voltage in the main circuit to ensure the DC voltage is within the safe voltage range. Failure to comply can result in electric shock.
- Do not perform wiring, remove the equipment cover, or touch the circuit board with power ON. Failure to comply could result in electric shock.
- Ensure that the equipment is grounded properly. Failure to comply could result in electric shock. Separate grounding or single-point grounding, other than common grounding, is recommended.



- Insulate the cable terminals properly to ensure the insulation distance between cables will not be shortened after cables are connected to the terminal block. Failure to comply could result in electric shock or equipment damage.
- Install the terminal cover attached to the equipment before power-on or operation after wiring is completed. Failure to comply could result in electric shock.

WARNING

- Never connect the power cable to output terminals of the equipment. Failure to comply could cause equipment damage or even fire.
- Cables used for wiring must comply with the requirements for the cross-sectional area and shielding. The shielding layer of the shielded cable must be reliably grounded at one end.
- Tighten the terminal screws with the torque specified in the user guide. Insufficient or excessive torque may cause overheating and damage to the joint, which could result in fire.
- After wiring is done, ensure that all cables are connected properly and no screws, washers or exposed cables are left inside the equipment. Failure to comply could result in electric shock or equipment damage.

Caution

- Follow the proper electrostatic discharge (ESD) procedure, and wear an anti-static wrist strap to perform wiring. Failure to comply could damage the equipment or its internal circuits.
- Use shielded twisted pair cables for the control circuit. Connect the shield to the grounding terminal of the equipment. Failure to comply may result in equipment malfunction.

Power-on

DANGER

- This equipment must be operated only by trained and qualified electrical personnel. Non-professionals must not operate this equipment.
- Before power-on, ensure that the equipment is installed and wired properly.
- Ensure that the power supply meets equipment requirements before power-on to prevent equipment damage or fire accident.
- Do not open the cabinet door or protective cover of the product, touch any wiring terminal of the product, or remove any components or parts while the product is powered on. Failure to comply could result in personal injury or even death.

WARNING

Perform a trial run after wiring to ensure the equipment operates safely. Failure to comply could result in personal injury or equipment damage.

Operation
DANGER • The equipment must be operated only by professionals. Failure to comply can result in injury or death. • Do not touch any connecting terminals or disassemble any unit or component of the equipment during operation. Failure to comply could result in electric shock.
WARNING • Do not touch the enclosure, fan, or resistor with bare hands. Failure to comply could result in burns. • Prevent metal or other objects from falling into the equipment during operation. Failure to comply could result in fire or equipment damage. • During operation, do not bring live parts into contact with the metal enclosure of the product. Failure to comply could result in fire or product damage.
Caution • Operate the equipment within the specified environmental conditions. Failure to comply could result in equipment failure or damage. • Touch the HMI panel with hands only. Failure to comply could cause panel damage, which is out of the warranty range.
Safety recommendations • In positions where the operator directly touches the mechanical parts, for example, where a mechanical device is loaded/unloaded, or where a machine runs automatically, manually-operated devices or other alternative means must be carefully designed so that they are independent of the equipment to start or stop the automatic operation of the system. • If you need to modify the program while the system is running, use the lock function or other protective measures. Ensure that only authorized personnel can make the necessary modifications.

Battery usage
WARNING • Do not use batteries that do not meet the product requirements. Failure to comply could result in death, personal injury, explosion, or fire. • Do not throw batteries into fire or hot ovens. Do not crush or cut the battery. Failure to comply could result in death, personal injury, explosion, or fire. • Do not expose the battery to extremely high temperatures. Failure to comply could result in death, personal injury, explosion, or fire. • Do not swallow batteries. Failure to comply could result in chemical burns. • Seek for medical treatment immediately if a button battery is swallowed by accident, because this may cause severe internal burns within two hours and even death.
Caution • Keep batteries out of reach of children. • If the battery compartment is not securely closed, stop using the product immediately and keep it out of reach of children.

Maintenance
DANGER • Maintenance must be performed only by trained and qualified electrical personnel. • Do not maintain the equipment with power ON. Failure to comply could result in electric shock. • Before maintenance, disconnect all the power supplies of the equipment and wait for at least the time specified on the warning label. • Disconnect all external power supplies of the system before cleaning the equipment or re-tightening screws on the terminal block or screws for connector installation. Failure to comply could result in electric shock. • Disconnect all external power supplies of the system before removing or installing the product, or connecting or disconnecting cables. Failure to comply may result in electric shock or malfunctions.

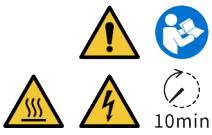
Maintenance
WARNING Perform routine and periodic inspection and maintenance on the equipment according to maintenance requirements and keep a maintenance record.

Repair
DANGER • Repair must be performed only by trained and qualified electrical personnel. • Do not repair the equipment with power ON. Failure to comply could result in electric shock. • Before inspection or repair, disconnect all the power supplies of the equipment and wait for at least the time specified on the warning label.
WARNING • Submit a request for repair based on the warranty agreement. • When the fuse is blown or the circuit breaker or earth leakage circuit breaker (ELCB) trips, wait for at least the time designated on the equipment warning label before power-on or further operations. Failure to comply could result in equipment damage, personal injury, or death. • Troubleshooting and repair of a faulty or damaged equipment must be performed by professionals based on the repair instructions, with the repair records kept properly. • Replace quick-wear parts of the equipment according to the replacement instructions. • Do not use damaged equipment. Failure to comply could result in death, personal injury, or severe equipment damage. • Recheck the wiring and reset the parameters after equipment replacement.

Disposal
WARNING • Dispose of the retired equipment in accordance with applicable national regulations and standards. Failure to comply could result in property damage, personal injury, or death. • Recycle retired equipment in accordance with industry waste disposal standards to avoid environmental pollution. • Treat the scrapped equipment as industrial waste. Dispose of the batteries according to local laws and regulations.

Safety labels

To ensure safe operation, comply with safety labels on the equipment and do not damage or remove the labels. The following table describes the meanings of the safety labels.

Safety labels	Description
	• Before using the equipment, read the guide and safety precautions carefully. Failure to comply may result in personal injury, death, or equipment damage. • Do not touch the terminals or remove the cover with power-on or within 10 min after power-off. Failure to comply could result in electric shock. • The surface of the product may become very hot during operation. Do not touch these hot areas, as this may cause burns!

1.2 Industrial Information Security

The product provides interfaces for network connection and data transmission. To protect factories, systems, machines, and networks from cyberattacks, it is essential to implement proper protection mechanism for industrial security.

Customers are responsible for providing and maintaining a secure connection between the product and their network or any other network to protect their factories, systems, machines, and networks from unauthorized access. Such systems or machines can be connected to an enterprise network or the Internet only when a secure connection is established and appropriate security measures (such as using antivirus software or installing firewalls) are in place.

Inovance continuously develops and improves products and solutions to enhance safety. It is strongly recommended that you update the product promptly and always use the latest version.



Malware (such as viruses, Trojans, and worms) can bring the device into an unsafe operating state, resulting in death, serious injury, and property damage. Observe the following precautions:

- Always use the latest software version. If the product version is no longer supported or the latest version is not used, you will be exposed to increased risk of cyber attacks.
- Develop and maintain appropriate protective measures (including but not limited to antivirus software, firewalls, WAF, IPS/IDS, situational awareness system, identity authentication, and data encryption) to prevent the files in mobile storage devices from being damaged by malware, and to protect the products, networks, systems, and interfaces from unauthorized access, tampering, hacking, data leakage, or information theft.
- Check all safety-related interfaces and settings after commissioning.

2 Model

2.1 Model Number

The naming rules of the IT7000 series HMI are shown below.

IT ① 7 ② 070 ③ T ④ - F01 ⑤

①	**Product type** IT: General-purpose Inovance HMI	②	**Product series** 7: 7000 series	③	**Screen size** 043: 4.3'' 070: 7'' 100: 10'' 150: 15''
④	**Performance type** S: Standard T: Template E: Enhanced P: Professional	⑤	**Function configuration** Blank: None F01: Conformal coating protection model F03: High-protection dedicated model	-	

2.2 Model

Table 2–1 IT7000 Series HMI Models

Model	IT7043T-F01 IT7043E-F01	IT7070S IT7070S-F03	IT7070T IT7070E IT7070E-F03	IT7100S IT7100E	IT7150E IT7150P
Dimen-sions	4.3"	7''	7''	10"	15"
Appear-ance					
Label	T: Template E: Enhanced F01: Conformal coating protection model	S: Standard F03: High-protection dedicated model	T: Template E: Enhanced F03: High-protection dedicated model	S: Standard E: Enhanced	E: Enhanced P: Professional

2.3 Appearance

The appearances of IT7000 series products are shown below.



Figure 2-1 IT7043T-F01/IT7043E-F01



Figure 2-2 IT7070S/IT7070S-F03 series PLC



Figure 2-3 IT7070T/IT7070E/IT7070E-F03/IT7100S/IT7100E



Figure 2-4 IT7150E/IT7150P

3 Product Specifications

3.1 Screen and Processor

Type	IT7043T-F01	IT7043E-F01	IT7070S*1	IT7070T	IT7070E*2	IT7100S	IT7100E	IT7150E	IT7150P
Screen size	4.3"		7''			10.1"		15"	
Resolution	480 x 272		800 x 480			1024 x 600		1024 x 768	
Brightness (cd/m²)	400		350						
Display color	16.7 million colors								
Backlight service life	30000 h		35000 h			30000 h		50000 h	
Processor	Single-core Cortex A8 600 MHz					Single-core Cortex A8 1GHz			Quad-core Cortex A7 1.2 GHz
RAM	128 M DDR3						256 M DDR3		512 M DDR3
Storage	128 MB						256 M		512 M
Dongle	Supported								
Model code	01450127	01450126	01450038	01450030	01450039	01450037	01450036	01450028	01450247

Note

*1: IT7070S-F03: model with high IP rating and same processor configurations as IT7070S, model code: 01450081

*2: IT7070E-F03: model with high IP rating and same processor configurations as IT7070E, model code: 01450079

3.2 Hardware Interface

Interface	IT7043T-F01	IT7043E-F01	IT7070S*1	IT7070T	IT7070E*2	IT7100S	IT7100E	IT7150E	IT7150P
Power supply interface	Input voltage: 24 VDC ±20%; Rated current: 200 mA		Input voltage: 24 VDC±20%; Rated current: 250 mA			Input voltage: 24 VDC ±20%; Rated current: 300 mA		Input voltage: 24 VDC ±20%; Rated current: 800 mA	
USB interface	/		USB 2.0 interface*1						
USB down-load interface	USB type-B interface	/	Mini USB interface*1 (for downloading user programs)						
SD card interface	/				MicroSD inter-face*1 (with a maximum capacity of 64 GB)	/	MicroSD interface*1 (with a maximum capacity of 64 GB)		
RS232	COM2 DB9 female connector		/	COM2 DB9 male connector		/	COM2 DB9 male connector		

Interface	IT7043T-F01	IT7043E-F01	IT7070S*1	IT7070T	IT7070E*2	IT7100S	IT7100E	IT7150E	IT7150P
RS485/ RS422	COM1 DB9 female connector (RS422/RS485) COM3 DB9 female connector (RS485)		COM1 DB9 male connector (RS422/RS485)		COM1 DB9 male connector (RS422/ RS485) COM3 DB9 male connector (RS485)	COM1 DB9 male connector (RS422/ RS485)	COM1 DB9 male connector (RS422/RS485) COM3 DB9 male connector (RS485)		
Ethernet interface	/	RJ45 Ethernet inter-face*1	/		10/100M adaptive RJ45 Ethernet interface*1 (for downloading user programs)				
Model code	01450127	01450126	01450038	01450030	01450039	01450037	01450036	01450028	01450247

Note

*1: IT7070S-F03: model with high IP rating and same external hardware interface as IT7070S, model code: 01450081

*2: IT7070E-F03: model with high IP rating and same external hardware interface as IT7070E, model code: 01450079

3.3 Mechanical Characteristics

Type	IT7043T-F01	IT7043E-F01	IT7070S*1	IT7070T	IT7070E*2	IT7100S	IT7100E	IT7150E	IT7150P
Dimen-sions Unit: mm	128 x 102 x 35		200 x 146 x 35			271 x 213 x 36		367.8 x 294.8 x 53	
Cut-out dimen-sions Unit: mm	119 x 93		193 × 139			260 x 202		352 x 279	
Housing color	Metal grey		Front and rear covers: Black	Front and rear covers: Silver		Front and rear covers: Silver		Front and rear covers: Silver	
Hard-ware interface orienta-tion	Back of the rear cover							Below the rear cover	
Mechani-cal structure	Engineering plastics							Front housing: aluminum alloy; rear cover: sheet metal	
Model code	01450127	01450126	01450038	01450030	01450039	01450037	01450036	01450028	01450247

Note

*1: IT7070S-F03: model with high IP rating and same mechanical design specifications as IT7070S, model code: 01450081

*2: IT7070E-F03: model with high IP rating and same mechanical design specifications as IT7070E, model code: 01450079

3.4 Environment Specifications

Type	IT7043T-F01	IT7043E-F01	IT7070S*1	IT7070T	IT7070E*2	IT7100S	IT7100E	IT7150E	IT7150P
Panel IP rating	Front panel IP65, rear cover IP20								
Ambient temperature	0 °C to +50 °C			-10°C to +55°C				0 °C to +50 °C	-10°C to +55°C
Operating humidity	10% RH to 90% RH, without condensation								
Storage temperature	-20 °C to +70 °C								
UV protection	Avoid prolonged use in environments with strong UV radiation, such as outdoors under direct sunlight.								
Vibration resistance	Testing conditions: sine vibration; 3.5 mm displacement from 5 Hz to 8.4 Hz; 1 g acceleration from 8.4 Hz to 150 Hz; 10 times in each of X, Y and Z directions								
Impact resistance	Impact, 15 g, 11 ms, 3 times in each of X, Y, and Z directions								
Electromagnetic compatibility	Compliant with EN 61131-2:2007 standards and CE certification standards								
Model code	01450127	01450126	01450038	01450030	01450039	01450037	01450036	01450028	01450247

Note

*1: IT7070S-F03: model with high IP rating and resistance against greasy dirt and UV, model code: 01450081

*2: IT7070E-F03: model with high IP rating and resistance against greasy dirt and UV, model code: 01450079

Caution

- Do not operate the device in harsh environments with corrosive gases, heavy dust, high humidity, or airborne conductive particles (e.g., carbon fibers).
- Do not transport, store, and operate the device in strong ultraviolet environments (e.g., outdoors with direct sunlight) for a long time.
- Transport at the extreme temperatures (-40°C/+70°C) may result in a slight bulge of the membrane. The bulge disappears automatically at room temperatures, which does not affect its function.
- The theoretical service life of the built-in button battery is 3 to 5 years at room temperature. The actual service life may vary depending on the on-site operating conditions, such as temperature and humidity.

3.5 Dimensions

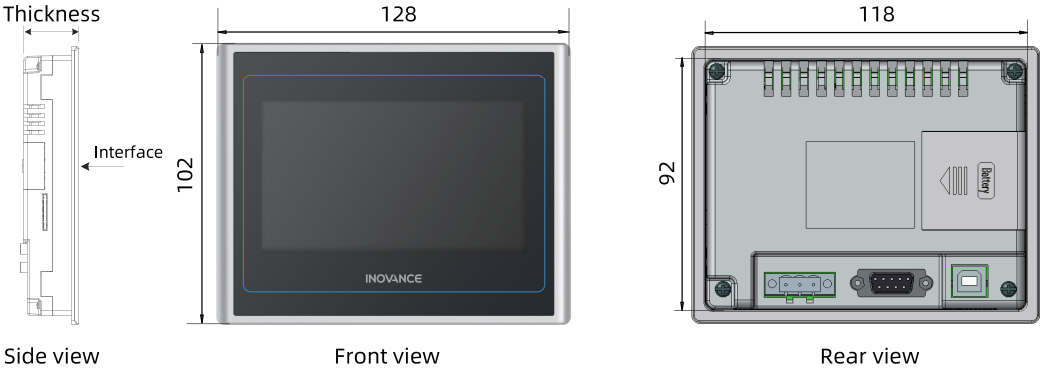


Figure 3-1 4.3-inch product dimensions

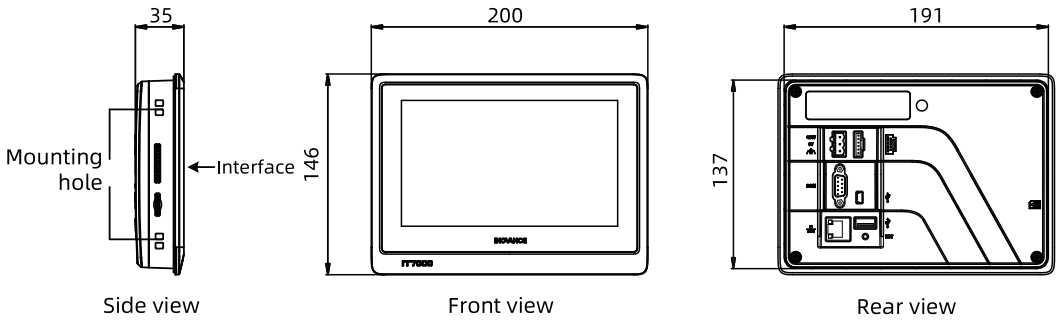


Figure 3-2 7-inch product dimensions

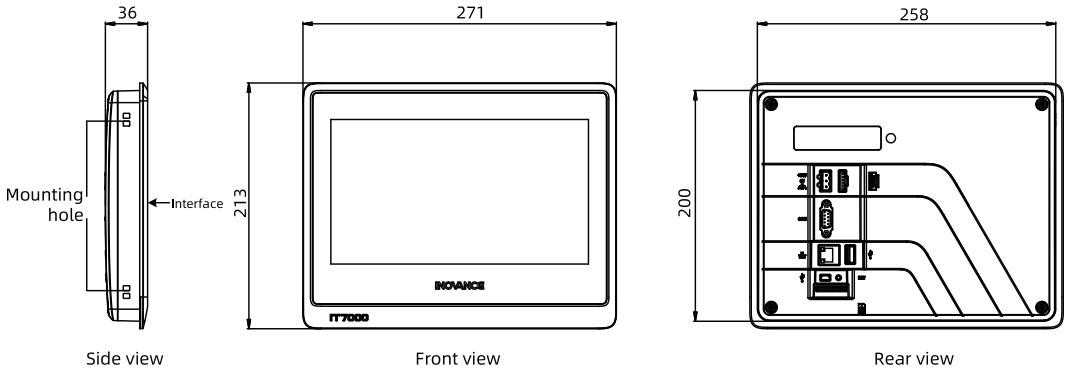


Figure 3-3 10-inch product dimensions

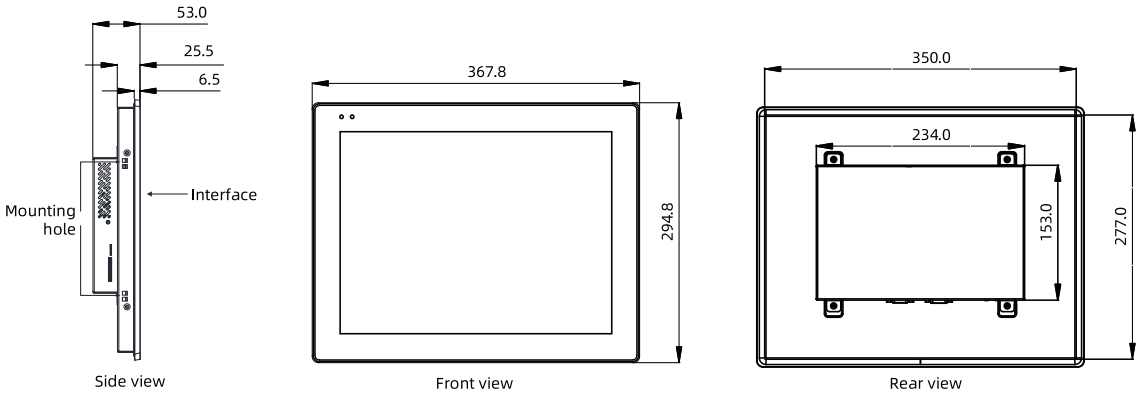


Figure 3-4 15-inch product dimensions

Model	Display size (inch)	Outline dimensions Length x Width x Depth (mm)	Panel cutout dimensions (W x H) (mm)	Cut-out dimension (W + 2) (mm)	Cut-out dimension (H + 2) (mm)
IT7043T-F01	4.3	128 x 102 x 35	118 x 92	119 Cutout dimension: W + 1	93 Cutout dimension: H + 1
IT7043E-F01					
IT7070S	7	200 x 146 x 35	191 x 137	193	139
IT7070T					
IT7070E					
IT7100E	10	271 x 213 x 36	258 x 200	260	202
IT7100S					
IT7150E	15	367.8 x 294.8 x 53	350 x 277	352	279
IT7150P					

4 Accessory

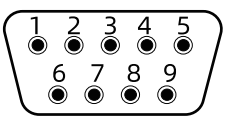
4.1 Program Download and Communication Cable

Cable code	Cable model	Applicable HMI	Cable terminal	Applicable PLC	Precautions
15041140	IT5-H2U-CAB	IT6000: Models that support RS232 communication ports IT7000: IT7043TF-01/IT7043EF-01/ IT7150E/IT7150P	Purpose: Straight-through communication cable HMI end - DB9 male connector (RS422); PLC end - MD8 circular male connector (RS422)	1. Inovance H1U/ H2U/H3U - connected to RS422 circular communication port 2. Mitsubishi FX1N/ 2N/3U/3G - connected to RS422 circular communication port	This cable is used to connect the COM1 port (with RS422 pinout) of the IT6000 series HMI to the RS422 communication port of the Inovance H1U/H2U/H3U and Mitsubishi FX1N/2N/ 3U/3G PLC. Incompatible with the IT7000 series: The COM1 port of IT7000 is a male connector. The HMI end of this cable is also a male connector. They cannot be directly connected. 2. The pinout of the COM1 port of the IT7000 series HMI is different from that of the IT6000.
1504AX53	IT7-H3U-CAB	IT6000: All models IT7000: IT7070S/ IT7070T/IT7070E/ IT7100S/IT7100E	Purpose: Straight-through communication cable HMI end - DB9 female connector (RS422); PLC end - MD8 circular male connector (RS422).	1. Inovance H1U/ H2U/H3U - connected to RS422 circular communication port 2. Mitsubishi FX1N/ 2N/3U/3G - connected to RS422 circular communication port	It is recommended to use this communication cable.

Cable code	Cable model	Applicable HMI	Cable terminal	Applicable PLC	Precautions
15042148	H2U-232-CAB	IT7000: IT7070T/ IT7070E/IT7100E/ IT7150E/IT7150P	Purpose: RS232 to RS422 communication cable HMI end - DB9 female connector (RS232); PLC end - MD8 circular male connector (RS422)	1. Inovance H1U/ H2U/H3U - connected to RS422 circular communication port 2. Mitsubishi FX1N/ 2N/3U/3G - connected to RS422 circular communication port	This cable is not recommended. You can use a customized RS232 to RS422 cable with pins assigned properly according to this guide. 1. If you are currently using this cable, it is recommended to switch to IT7-H3U-CAB and change the communication scheme of the HMI. 2. This cable connects to the COM2 port (with RS232 pinout) of the IT7000 series HMI. IT7-H3U-CAB connects to the COM1 port (with RS422 pinout) of the IT7000 series HMI. Note this distinction when changing the cable.
15310234	IT7-Easy-CAB	IT7000: IT7070T/ IT7070S/IT7070E/ IT7100S/IT7100E/ IT7150E/IT7150P	Purpose: Straight-through communication cable HMI end - DB9 female connector (RS232/RS485); PLC end - communication port (RS232/RS485)	Inovance Easy300/ Easy500 - connected to RS232/RS485 communication port	It is recommended to use this communication cable.
15041200	H2U-USB-CAB	IT7000 series models	Purpose: USB download cable (Mini USB) PC end - USB 2.0/3.0 port; HMI end - Mini USB port	/	This cable is used to upload/download user programs for the IT7000 series HMI on a PC. The Mini USB port of this cable is incompatible with the USB type B port of the IT6000 series HMI.

DB9 male connector

The IT7000 series HMI provides one DB9 communication port (DB9 male connector) and one to three built-in serial communication port(s) for connecting the PLC, AC drive, printer, or other intelligent devices. The product supports multiple built-in communication protocols and is typically used as the communication master to access data from external devices. The following figure shows the terminal structure and silk printing.



COM1 [RS485 2/4W]
COM2 [RS232]
COM3 [RS485]

DB9 male connector
(ejector-type signal slot)

The DB9 male connector includes three built-in serial communication ports COM1, COM2 and COM3. The pins are described in the following table.

Pin No.	Signal			
	COM1 [RS485] 2 Wires	COM1 [RS485] 4 Wires	COM2 [RS232]	COM3 [RS485]
1	-	-	-	RS485-
2	-	-	RS232 RXD (Receive Data)	-
3	-	-	RS232 TXD (Transmit Data)	-
4	-	TX+ (Transmit +)	-	-
5	GND (Signal Ground)			
6	-	-	-	RS485+
7	RS485-	RX- (Receive -)	-	-
8	RS485+	RX+ (Receive +)	-	-
9	-	TX- (Transmit -)	-	-

Note

COM1 [RS485] port with four wires is equivalent to COM1 [RS422] port.

4.2 Power Supply Terminal and Snap-fit Joint

Inovance provides a complete accessory kit designed for the power port and installation of the product. The types and quantities of accessories included are listed in the table below.

Type	Quantity
Power supply terminal	1
Metal clips (with screws)	4 or 8
Packing bag	1

Note

The accessories of the 4.3-inch, 7-inch, and 10-inch IT series screens include four metal snap-fit joints with screws (ordering number: 98050285).

The accessory kit of the 15-inch IT series screen includes eight metal clips with screws (order no.: 80240085).

Service and Support

Should you encounter a safety accident during the use or operation of the product, or face challenges in operating and maintaining the equipment, which remain unresolved after the relevant documentation is consulted, we provide multiple channels to ensure prompt resolution:

- Channel #1: Contact service@inovance.com.
- Channel #2: Visit https://www.inovance.com/global to access document downloads, after-sales support, spare parts ordering, repair applications, and authenticity verification services.
- Channel #3: Download My Inovance app (https://zshc-eu.inovance.com/download-pc/) where you can access products info and documentation, and query product parameters.

We are committed to providing you with quick and professional technical support, and we look forward to your satisfaction and trust.

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