

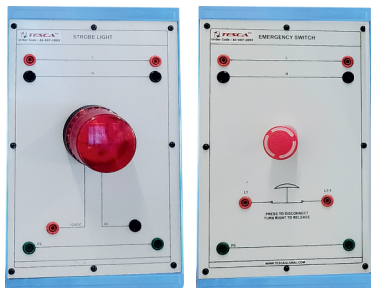
Artificial intelligence (AI) refers to the simulation of human intelligence in machines that are programmed to think and act like humans. It involves the development of computer systems and software that can perform tasks that would typically require human intelligence, such as learning, problem-solving, decision-making, speech recognition and face recognition. The Artificial Intelligence Trainer consist of: AI CPU Intel CPU Ultra, 2 Camera, Keyboard and Mouse Wireless, 15.6" Touch Screen Industrial Monitor and 4 input 4 output General Purpose Input/Output (GPIO).



AI 007-1001 - ARTIFICIAL INTELLIGENCE TRAINER MASTER UNIT

Experiments Included in This Unit

- Introduction to Artificial Intelligence (AI)
- Introduction to AI Training Kit (Hardware, Windows 11 / Linux Ubuntu Setup and Jupyter Notebook Setup)
- Introduction and Experiments with OpenCV
- Introduction and Experiments with OpenVINO toolkits



AI 007-1002 - STROBE LIGHT AI 007-1003 - EMERGENCY SWITCH

Experiments Included in This Module

- Object Detection with Strobe Light

STROBE LIGHT

1. Supply voltage: 12VDC
2. Current: 100mA
3. Shrouded Sockets

EMERGENCY SWITCH

1. Insulation Voltage : 600V
2. Material: Metal
3. Normally Close
4. Shrouded Sockets



AI 007-1004 - PILOT LAMP

Experiments Included in This Module

- Hand Gesture Finger Counter with AC LED
- Color Detection with AC LED

PILOT LAMP

1. AC 220V Size : 22mm
2. Body Material: Plastic
3. Color: Red, Green, Blue: 2
4. Shrouded Sockets

Note: Specifications are subject to change.

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AI 007-1005 - SINGLE PHASE AC POWER SUPPLY
AI 007-1006 - POWER CONTROL
AI 007-1007 - 3-FOLD RELAY
AI 007-1008 - CONVEYOR MODULE

Experiments Included in This Module

- Left/Right Hand Detection with Conveyor

SINGLE PHASE AC POWER SUPPLY Power

1. Operating voltage: AC 100-240V
2. Power rating : 10A
3. Fuse rating : 250V and 10 A

RCCB

1. Current Rating:25 Amps
2. Mounting Type: DIN Rail Mount

MCB

1. Current Rating:10 Amps
2. Mounting Type:DIN Rail Mount
3. Shrouded Sockets

POWER CONTROL AC to DC Adapter Converter

1. Type:AC/DC power supply
2. Input voltage:110-240 (V)
3. Output voltage:3-24 (V)
4. Output current:2 (A)

3-FOLD RELAY


1. Relay -3
2. Mounting: Plug in Type
3. Coil Voltage:24V
4. Contact : 4 C/O
5. Current:5A

CONVEYOR MODULE

1. 3-24V Operated



AI 007-1009 - ALUMINIUM FRAME (OPTIONAL)

<p>AI CPU INTEL ULTRA</p> 	<p>PROCESSOR SYSTEM</p> <p>Intel® Core™ Ultra 7 Processor 155H Chipset: Intel Meteor Lake - U/P/H PCH BIOS: AMI UEFI BIOS (SPI Flash) DISK CAPACITY: 500 GB</p>
<p>DISK CAPACITY: 500 GB</p>	
<p>MEMORY</p>	
<p>Technology</p>	<p>Dual Channel DDR4 300 MHz</p>
<p>Capacity</p>	<p>64 GB (32 GBx2)</p>
<p>Socket</p>	<p>2× SO-DIMM slots</p>
<p>GRAPHICS</p>	
<p>Controller</p>	<p>Intel® Arc™ GPU</p>
<p>HDMI</p>	<p>HDMI 2.1 (TMDS)</p>
<p>Max resolution</p>	<p>7680 × 4320 @ 60Hz</p>
<p>DisplayPort</p>	<p>Thunderbolt 4 (DisplayPort 1.4) Max resolution: 7680×4320 @ 60Hz</p>
<p>Multi-Display</p>	<p>Up to 4-display output supported (2× HDMI + 2× DP from Thunderbolt ports)</p>

Note: Specifications are subject to change.

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EXPANSION SLOT	
M.2 Slot / WLAN	Intel® Wi-Fi 6E AX211 (Gig+), Bluetooth® 5.3
AUDIO	
Interface	Audio is provided via HDMI Thunderbolt/USB-C External USB sound cards
ETHERNET	
Controller / Speed	Intel® Ethernet Controller I226-V / I226-LM Supports 10/100/1000/2500 Mbps
Connector	RJ-45 LAN port
FRONT I/O	
USB	1× USB 3.2 Gen2x2 (Type-C) 2× USB 3.2 Gen2 (Type-A)
REAR I/O	
HDMI	2× HDMI 2.1 (TMDS)
Ethernet	1× 2.5 Gigabit LAN (RJ-45)
USB	2× Thunderbolt™ 4 (USB-C) with DisplayPort 1.4 1× USB 3.2 Gen2 (Type-A), 1× USB 2.0 (Type-A)
DC Jack	1× DC-in (19V)
OTHERS	
OS SUPPORT	Windows 11 64-bit
CAMERA 1	
	Video Capture Resolution: 1080p Flash Memory Type: SD Video Capture Format: Mp4 Supported Audio Format: AAC, PCM Connectivity Technology: USB Focus Type: autofocus Microphone: Built-in Interface: USB Drive free
CAMERA 2	
	Video Capture Resolution: 720p Supported Audio Format: AAC, Mp3, PCM Connectivity Technology: USB

Note: Specifications are subject to change.

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WIRELESS KEYBOARD AND MOUSE



Keyboard
Mouse
Connection Range: 10 meters
Connectivity Technology: Wireless/ USB

TOUCH SCREEN MONITOR



Screen Size:15.6 Inches
Resolution:FHD 1080p

Digital Input



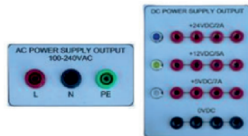
4 Digital Input : +5VDC/7A
Shrouded Socket: 4 mm

Digital Output



4 Digital Output (Relay Contact 10A)
Shrouded Socket: 4 mm

HDMI Port



AC Input Power Supply : 100-240VAC
DC Output Power Supply : 24V/2A, 12V/5A, 5V/7A

Operating System - Windows 11 (Optional)

Windows 11 is Microsoft's latest operating system featuring a modern and user-friendly interface with fast performance and smooth multitasking. It includes advanced security features like Secure Boot, TPM 2.0, and Windows Defender, receives regular updates, supports the latest software, and is well-suited for office work, study, business, and personal use.

Linux Ubuntu (Optional)

Ubuntu is a popular Linux-based operating system known for its stability and security. It offers a user-friendly interface suitable for beginners and professionals. Ubuntu supports a wide range of software for office, development, and servers. It is free, open-source, and regularly updated by the community.

Web Application – Jupyter Notebook

Jupyter Notebook is an open-source web application that allows you to create and share documents containing live code, equations, visualizations, and narrative text. It is widely used in data science, scientific computing, machine learning, and education for its interactive and collaborative capabilities.

Software Toolkit - Openvino

OpenVINO (Open Visual Inference and Neural Network Optimization) is an open-source toolkit developed by Intel. It is designed to accelerate the development of high performance computer vision and deep learning applications. OpenVINO allows developers to optimize and deploy deep learning models on various Intel hardware, including CPUs, GPUs, VPUs (Vision Processing Units), and FPGAs (Field Programmable Gate Arrays).

List of Accessories:

1. Patch cords Shrouded 4mm length 100cm Red.....20
2. Patch cords Shrouded 4mm length 100cm Black.....20

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