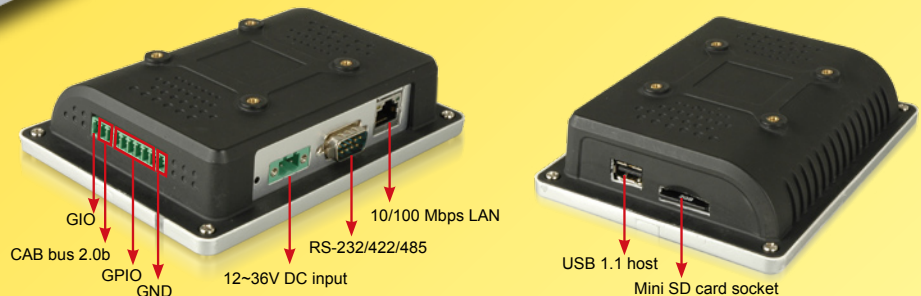# IOVU-430M

Multi-touch Empowered Arm Based Flat-bezel Panel PC

While touch sensor is commonplace for single points of contact, IOVU-430M's multi-touch sensor enables a user to interact with the system with more than one finger at a time. IOVU-430's RISC-based system provides high performance, lower power consumption, wide operating temperature, rugged compact form factor and cost-effective. Built-in Wi-Fi module, GPIO (General Purpose Input/Output) and CAN bus control have varied applications be flexible.
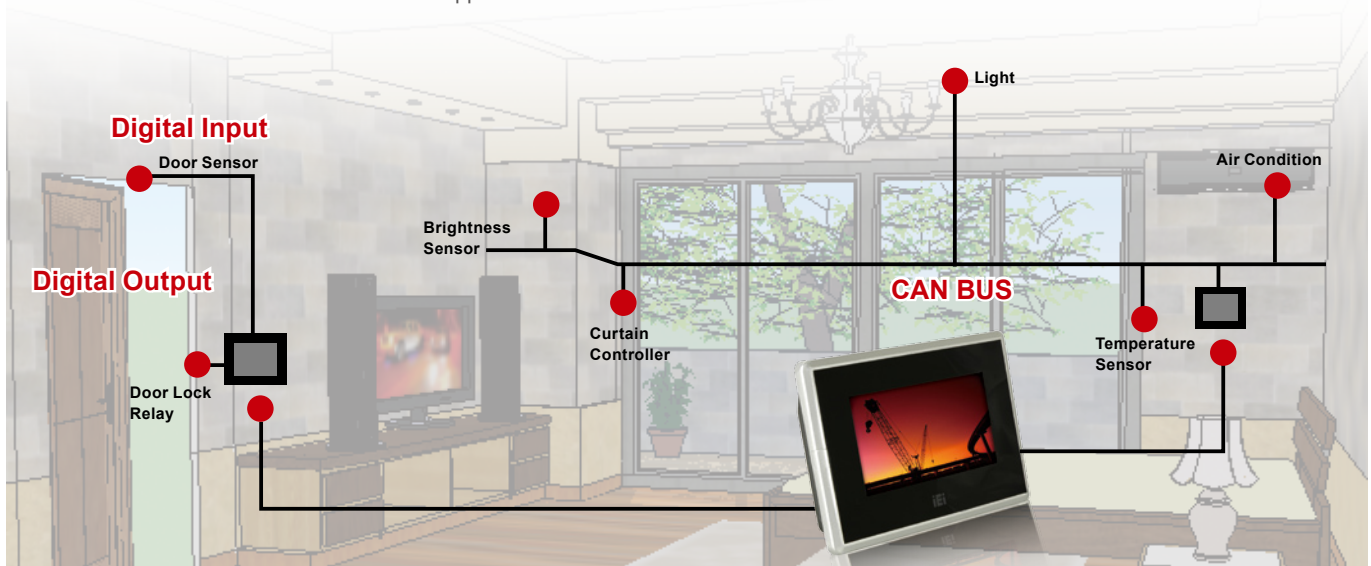
Features:

- RISC-based processor provides high performance and extremely low power consumption
- 4.3" widescreen WQVGA TFT LCD with projected-capacitor touch screen
- Multi-touch function provides flexible touch control
- Compact fanless design with plastic housing
- Built-in 1.5w speakers
- Built-in 802.11b/g Wi-Fi function
- CAN bus and GPIO provide flexible industrial control
- Flat multi-touch screen and IP65 compliant
- Mini Secure Digital (SD) card slot for storage expansion

GIO

CAB bus 2.0b

GPIO

GND

12~36V DC input

RS-232/422/485

10/100 Mbps LAN

USB 1.1 host

Mini SD card socket

IOVU RISC-based PPC | Microsoft Windows CE 5.0 | ARM | Multi-touch | Wide Temperature | Wireless 802.11 b/g | XScale® PX270
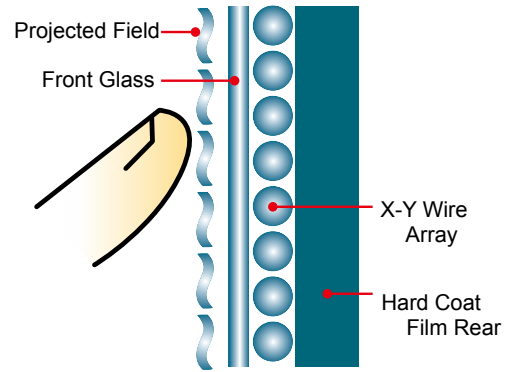
Flexible Connectivity

Designed for automation application, IOVU-430M provides various control interface choices to fit different automatic control applications. One can use GPIO (General Purpose Input & Output) in single control cases, for instance, to receive door sensor signal via digital input and send output signal to lock relay for door control. Furthermore, IOVU-430M provides CAN bus connectivity which empowers to compose a smart network in advanced automation applications

Light

Digital Input

Door Sensor

Air Condition

Brightness Sensor

Digital Output

CAN BUS

Curtain Controller

Temperature Sensor

Door Lock Relay

Projective Capacitor Multi-touch

Projected Field

Front Glass
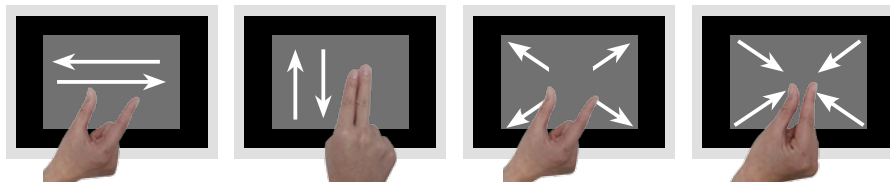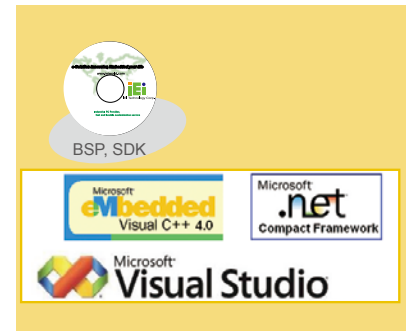
X-Y Wire Array

Hard Coat Film Rear

Activated by a finger or gloved hand

● Operation Theory

PCT is based on the principle of embedding an array of micro-fine sensing wires within a multi-layer laminated screen behind a protective front surface, ensuring that the sensing medium is well-protected from accidental and malicious damage.

● IEI IOVU-430M Multi-touch SDK

Empowered by equipping multi-touch technology, IOVU-430M provides user a more delight controlling experience. Comparing to conventional single touch technology, now application programmer can enhance user interface friendly by providing intuitive gesture control ways. IEI shares software development kit and demo AP with source code to support quick software building. IEI IOVU-430M multi-touch SDK provides up to 10 gestures for user to define various user behaviors which makes operating more convenient and interesting

BSP, SDK

Microsoft eMbedded Visual C++ 4.0

Microsoft .net Compact Framework

Microsoft Visual Studio
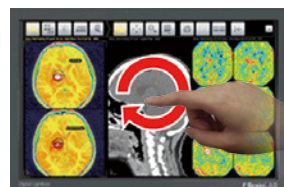
Slide (Multi-touch) Left (Right)

Slide (Multi-touch) Up (Down)
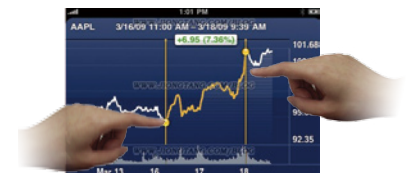
Zoom Out
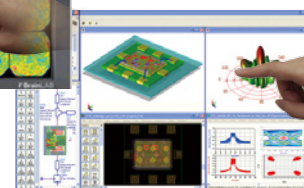
Zoom In

● Gesture Applications

Using combination of gestures, user can freely rotate, zoom-in, zoom-out to put emphasis on specific photograph, graphic, photo or diagram with ability to go back to a wider vision of the whole slide or page as well, providing more convenience and flexibility within process of communication

Presentation

Healthcare
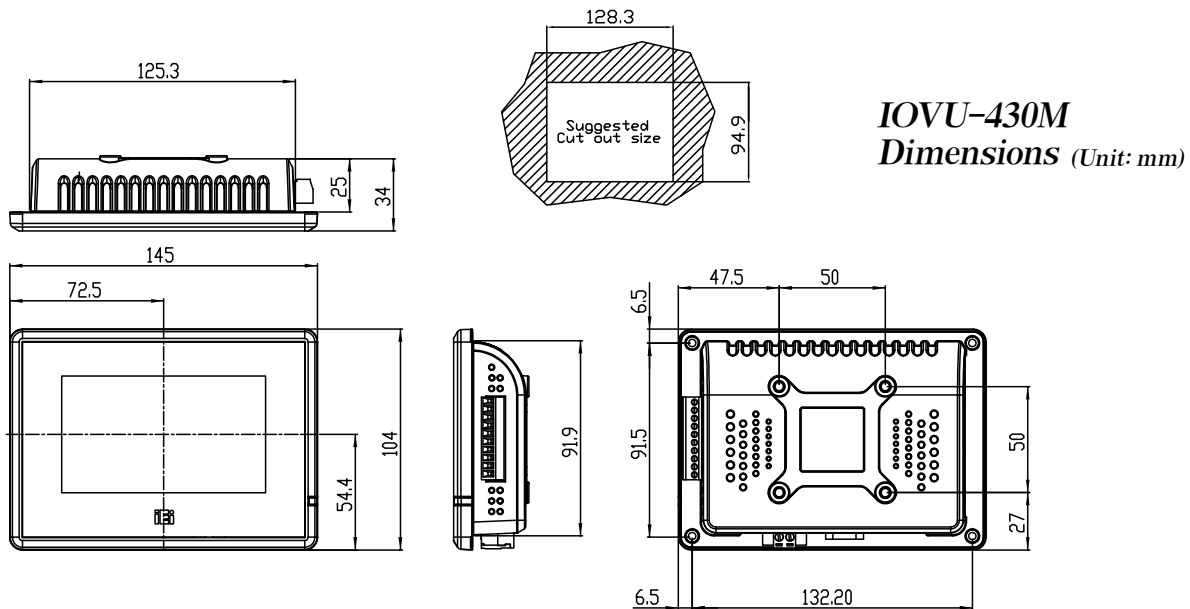
e-Collaboration

Flat Bezal Panel

The IOVU-430M full-flat surface screen makes the screen and bezel appear to blend seamlessly together. The flat-bezel design removes the front frame (bezel) of standard LCD to create a seamless surface. The IOVU-430M zero-bezel resistive/projective capacitive touch system offers aesthetic elegance, easy to clean, seamless front face.

- **Better visual effects**
- **No EDGE EFFECTS**
- **Sleek, stylish luxury look without clutter**
- **Easy clean properties**

IOVU-430M Specifications

Model	IOVU-430M
LCD size	4.3"
Max. Resolution	480 x 272
Brightness (cd/m²)	400
LCD Color	262K
Pixel Pitch (mm)	0.066(H) x 0.198(V)
Backlight MTBF	10000 hrs
Touch Screen	Projected-Capacitor
CPU	MARVELL XScale PXA270 416MHz
RAM	128MB SDRAM
Bootloader Storage	2MB boot ROM
OS/Program Storage	1GB Mini Secure Digital card
I/O Ports and Switches	1 x RS-232/422/485 COM port (software controllable) 1 x Reset button 1 x 10/100Mbps LAN 1 x USB1.1 host 1 x CAN bus 2.0b 6 x GPIO 2pin Terminal block DC input

Audio	1W speaker x 2
Construction Material	ABS + PC Plastic
LED Function	1 x Power ON/OFF LED on front panel
Mounting	Wall, Stand, Vstand and Arm (VESA 50 x 50)
Front Panel Color	Black
Dimensions (W x H x D mm)	145 x 104 x 34
Operation Temperature (ºC)	-20ºC ~ 50ºC
Storage Temperature (ºC)	-20ºC ~ 80ºC
Net Weight (kg)	0.7
IP Level (front panel)	IP 65
Power Requirement	12~36V DC input
Power Consumption	7W

IOVU-430M Dimensions (Unit: mm)

Packing List

1 x IOVU-430M
1 x Null modem cable
1 x Screw kits
1 x Utility CD includes SDK, utilities, and technical document
1 x Touch pen (only for single touch mode)

Options

Part No.	Description
63000-FSP0601AD101C760-RS	12V/5A DC 60W power adapter with bare wire, 90~264V AC input
IOVU-430M-IWC/B/-R10	In-Wall-Cage
IOVU-430M-IWC/W/-R10	In-Wall-Cage

Ordering Information

Part No.	Description
IOVU-430M-CE5/MT/-R10	4.3" TFT, WQVGA fan-less with MARVELL XScale PXA270 CPU, 128MB SDRAM, Projected-capacitor multi-touch Panel PC with built-in Windows® CE 5.0 license
IOVU-430M-CE5/ST/-R10	4.3" TFT, WQVGA fan-less with MARVELL XScale PXA270 CPU, 128MB SDRAM, Resistor type single-touth Panel PC with built-in Windows® CE 5.0 license
IOVU-430M-CE5/ST/WL/-R10	4.3" XSCALE PXA270 416MHZ resistor type Single-touch PANEL PC with 802.11b/g WiFi function ,BUILT-IN WINDOWS CE5.0
IOVU-430M-CE5/MT/WL/-R10	4.3" XSCALE PXA270 416MHZ capacitor type Multi-touch PANEL PC with 802.11b/g WiFi function ,BUILT-IN WINDOWS CE5.0