

# IKARPC-07A

Vehicle Computer Series

New

## Features

- 7" sunlight readable TFT LCD with projected capacitive touchscreen
- Built-in HSPA/GPRS/GSM, Wi-Fi and Bluetooth
- Built-in GPS receiver
- Supports On-Board Diagnostics: one CAN 2.0B or OBD-II

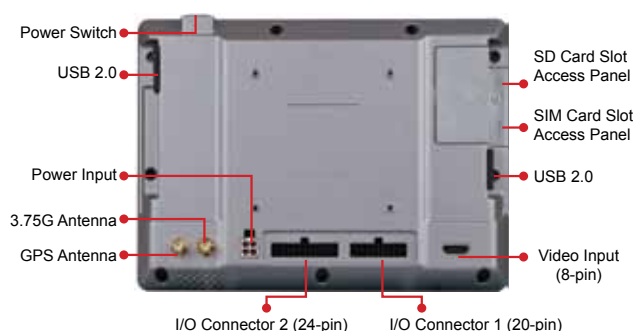


## Specifications

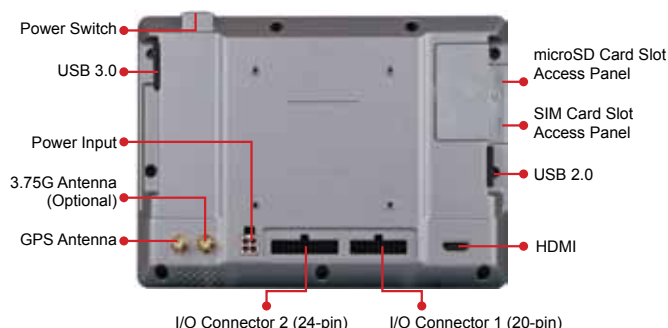
| Model Name             |                         | IKARPC-07A-A9                                                                                                | IKARPC-07A-BT                                                                                                                                                    |
|------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Chassis                | Color                   | Black C + Silver                                                                                             | Black C + Silver                                                                                                                                                 |
|                        | Dimensions (WxHxD) (mm) | 210 x 154 x 28                                                                                               | 210 x 154 x 28                                                                                                                                                   |
|                        | System Fan              | Fanless                                                                                                      | Fanless                                                                                                                                                          |
|                        | Chassis Construction    | PC + ABS plastic                                                                                             | PC + ABS plastic                                                                                                                                                 |
| Display                | Size                    | 7"                                                                                                           | 7"                                                                                                                                                               |
|                        | Resolution              | 1024 × 3 (RGB) × 600                                                                                         | 1024 × 3 (RGB) × 600                                                                                                                                             |
|                        | Brightness (cd/m²)      | 500                                                                                                          | 500                                                                                                                                                              |
|                        | Contrast Ratio          | 700:1                                                                                                        | 700:1                                                                                                                                                            |
|                        | Pixel Pitch (mm)        | 0.05 (W) × 0.15 (H)                                                                                          | 0.05 (W) × 0.15 (H)                                                                                                                                              |
|                        | Viewing Angle (H/V)     | 130° (H) / 140° (V)                                                                                          | 130° (H) / 140° (V)                                                                                                                                              |
|                        | Touchscreen             | Projected capacitive touch with USB interface                                                                | Projected capacitive touch with USB interface                                                                                                                    |
|                        | Touchscreen             | Projected capacitive touch with USB interface                                                                | Projected capacitive touch with USB interface                                                                                                                    |
| Motherboard            | CPU                     | Freescaler™ i.MX 6 Cortex™-A9 (quad-core, 1.0 GHz)                                                           | Intel® Atom™ processor E3826 (dual-core, 1.46 GHz, 7W)                                                                                                           |
|                        | Chipset                 | N/A                                                                                                          | SoC                                                                                                                                                              |
|                        | System Memory           | On-board 1 GB SDRAM                                                                                          | On-board 2 GB SDRAM                                                                                                                                              |
| Storage                | SD Card                 | 1 (supports SD 2.0, max. 32 GB)                                                                              | 1 (microSD, supports SD 2.0, max. 32 GB)                                                                                                                         |
|                        | mSATA                   | N/A                                                                                                          | 1 x mSATA (SATA 3Gb/s) optional                                                                                                                                  |
|                        | Flash                   | On-board 8 GB INAND flash                                                                                    | N/A                                                                                                                                                              |
|                        | Flash                   | On-board 8 GB INAND flash                                                                                    | N/A                                                                                                                                                              |
| Communication          | WLAN                    | On-board Wi-Fi 802.11a/b/g/n 2T2R                                                                            | PCIe Mini Wi-Fi 802.11a/b/g/n/ac (optional)                                                                                                                      |
|                        | Bluetooth               | Bluetooth 4.0 + HS                                                                                           | Bluetooth 4.0 + 3.0 HS Standard combined with Wi-Fi module (optional)                                                                                            |
|                        | WWAN                    | PCIe Mini, WCDMA/HSDPA/HSUPA                                                                                 | PCIe Mini, WCDMA/HSDPA/HSUPA (optional)                                                                                                                          |
|                        | RFID                    | 13.56 MHz ISO4443 A/B, read-write capable, ISO 14443A (MIFARE), ISO 14443B (FeliCa)                          | N/A                                                                                                                                                              |
|                        | GPS                     | On board GPS                                                                                                 | On board GPS                                                                                                                                                     |
|                        | GPS                     | On board GPS                                                                                                 | On board GPS                                                                                                                                                     |
| I/O Interfaces         | 20-pin Connector        | 1 x 10/100 LAN<br>1 x OBD-II/CAN bus<br>1 x USB 2.0                                                          | 1 x GbE LAN<br>1 x OBD-II/CAN bus<br>1 x USB 2.0                                                                                                                 |
|                        | 24-pin Connector        | 1 x Audio line-out (R+L)<br>1 x Audio line-in<br>1 x RS-232<br>4-bit digital I/O (2-bit input, 2-bit output) | 1 x Audio line-out (R+L)<br>1 x Audio line-in<br>1 x RS-232<br>4-bit digital I/O (2-bit input, 2-bit output)                                                     |
|                        | 8-pin Connector         | Video input                                                                                                  | N/A                                                                                                                                                              |
|                        | USB 3.0                 | N/A                                                                                                          | 1                                                                                                                                                                |
|                        | USB 2.0                 | 2                                                                                                            | 1                                                                                                                                                                |
|                        | Display                 | N/A                                                                                                          | 1 x HDMI                                                                                                                                                         |
|                        | SIM                     | 1                                                                                                            | 2                                                                                                                                                                |
|                        | Antenna                 | 1 x GPS, 1 x WWAN                                                                                            | 1 x GPS, 1 x WWAN                                                                                                                                                |
|                        | Antenna                 | 1 x GPS, 1 x WWAN                                                                                            | 1 x GPS, 1 x WWAN                                                                                                                                                |
|                        | Antenna                 | 1 x GPS, 1 x WWAN                                                                                            | 1 x GPS, 1 x WWAN                                                                                                                                                |
| Expansions             | PCIe Mini               | 1 x Full-size PCIe Mini for mSATA module                                                                     | 1 x Full-size PCIe Mini (reserved for mSATA module),<br>1 x Full-size PCIe Mini (reserved for 3G module),<br>1 x Half-size PCIe Mini (reserved for Wi-Fi module) |
| Multimedia             | Speaker                 | 1 x Speaker (2 W)                                                                                            | 1 x Speaker (2 W)                                                                                                                                                |
|                        | Camera                  | 5-megapixel CMOS                                                                                             | 2-megapixel CMOS                                                                                                                                                 |
| LED Indicator & Button | Indicator               | Power/BT/Wi-Fi/3G                                                                                            | Power/HDD/Wi-Fi/3G                                                                                                                                               |
| Power                  | Power Input             | Cigarette lighter power cable, DC 9 V~30 V                                                                   | Cigarette lighter power cable, DC 9 V~30 V                                                                                                                       |
|                        | Consumption             | 12 V @ 0.8 A                                                                                                 | 12V @ 1.25 A                                                                                                                                                     |
|                        | Mounting                | VESA 75                                                                                                      | VESA 75                                                                                                                                                          |
| Reliability            | Operating Temperature   | -20°C ~ 60°C with air flow                                                                                   | -20°C ~ 60°C with air flow                                                                                                                                       |
|                        | Storage Temperature     | -30°C ~ 70°C                                                                                                 | -30°C ~ 70°C                                                                                                                                                     |
|                        | Humidity                | 5% ~ 95%, non-condensing                                                                                     | 5% ~ 95%, non-condensing                                                                                                                                         |
|                        | Operating Shock         | Half-sine wave shock 5G, 11ms, 3 shocks per axis                                                             | Half-sine wave shock 5G, 11ms, 3 shocks per axis                                                                                                                 |
|                        | Operating Vibration     | MIL-STD-810F 514.5C-2 (with SSD)                                                                             | MIL-STD-810F 514.5C-2 (with SSD)                                                                                                                                 |
|                        | Weight (Net/Gross)      | 0.9 kg/2.1 kg                                                                                                | 0.9 kg/2.1 kg                                                                                                                                                    |
|                        | Safety/EMC              | CE/FCC/E-Mark                                                                                                | CE/FCC/E-Mark                                                                                                                                                    |
| OS                     | Supported OS            | Android 4.2.2                                                                                                | Microsoft® Windows® Embedded 8,<br>Microsoft® Windows® Embedded Standard 7 E                                                                                     |

## Fully Integrated I/O

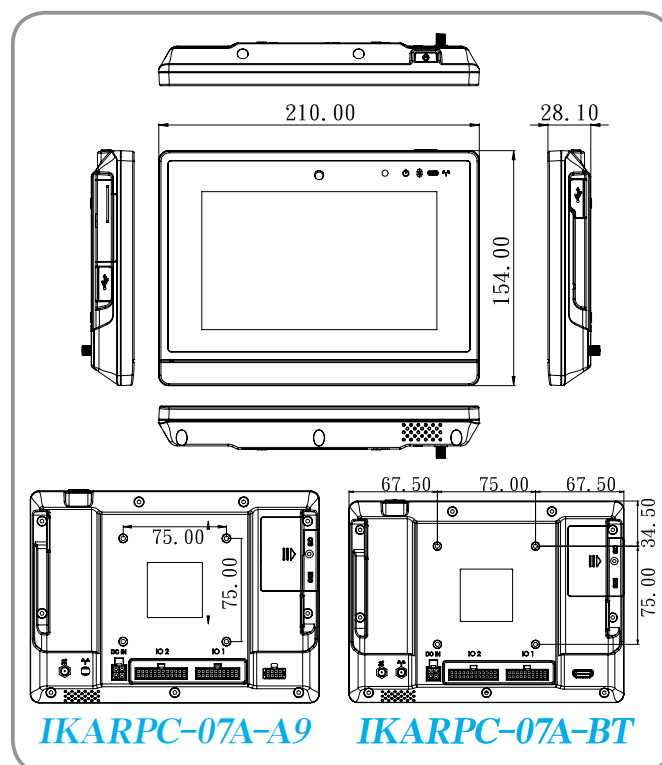
## IKARPC-07A-A9 Rear view



## IKARPC-07A-BT Rear view



## Dimensions (Unit: mm)



## Ordering Information

| Part No.                | Description                                                                                                                                                                                                   |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IKARPC-07A-A9-R10       | 7" 500 cd/m <sup>2</sup> 1024 x 600 in-vehicle panel PC with Freescale™ i.MX6 quad-core processor, 1.0 GHz, 1 GB SDRAM, 8 GB EMMC flash, 5-megapixel camera, RFID reader, OBD-II, HSUPA, GPS, Wi-Fi, BT, RoHS |
| IKARPC-07A-BT-E3/2G-R10 | 7" 500 cd/m <sup>2</sup> 1024 x 600 in-vehicle panel PC with Intel® Atom™ E3826 1.46 GHz processor, 7 W TDP, on-board 2 GB DDR3L memory, OBD-II, on-board GPS, 2-megapixel camera, RoHS                       |

## Options

| Item                          | Part No.            | Description                                                                                                                                                                      |
|-------------------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power adapter                 | IVIPOWER-4PIN-R10   | Power adapter with 4-pin transfer cable, RoHS                                                                                                                                    |
| Cigarette lighter power cable | 32002-004000-100-RS | Round cable, power cable, car cigarette lighter cable, 2000 mm, 18 AWG, (A) cigarette lighter (5 A 250 V)+ $\psi$ 3 green LED, (B) MOLEX 5557-0400 P=4.2, SHANGHAI YING YU, RoHS |
| VESA mount stand              | IVI-MK03-R10        | 138mm 75x75 VESA mount stand                                                                                                                                                     |
| OBD-II cable                  | 32025-000300-100-RS | Round cable, OBD-II cable, 2000 mm, 24 AWG, (A) OBD-II 16P male, (B) D-sub 9P female, one piece package with label, NIAN YEONG, RoHS                                             |
| J1939/FMS cable               | 32025-000400-100-RS | Round cable, J1939 cable, 2000 mm, 22 AWG, (A) J1939 9P male, (B) D-9P female, RoHS                                                                                              |

## IKARPC-07A-A9 Series

| Item                           | Part No.            | Description                                                                                                                                                                                                                 |
|--------------------------------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I/O connector 1 cable (20-pin) | 32024-002400-100-RS | Round cable, integration cable, I/O cable, 300 mm, 24 AWG, (A)terminal block 3P P=5.08, (B)USB A type female+2 NUT, (C)PCB jack: RJ-45 8P8C, (D)D-sub 9P male, (E)MOLEX 5557-2000 P=3.0, one piece package with label, RoHS |
| I/O connector 2 cable (24-pin) | 32024-002900-100-RS | Round cable, integration cable, I/O cable, 300 mm, 22 AWG, (A)terminal block 8P P=5.08, (B)MOLEX 43025-2400 P=3.0, (C)D-sub 9P male, (D)phone jack 3.5_3P+NUT, (E)phone jack 3.5_5P+NUT, one piece package with label, RoHS |
| Video input cable (8-pin)      | 32010-001700-100-RS | Round cable, video cable, 300 mm, 26 AWG, (A)MOLEX 43025-0800 P=3.0, (B)RCA jack, yellowx4, RoHS                                                                                                                            |

## IKARPC-07A-BT Series

| Item                             | Part No.                | Description                                                                                                                                                                                                                 |
|----------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I/O connector 1 cable (20-pin)   | 32024-003000-100-RS     | Round cable, integration cable, I/O cable, 300 mm, 24 AWG (A)terminal block 3P P=5.08, (B)USB A type female+2 NUT, (C)PCB jack: RJ-45 8P8C, (D)D-sub 9P male, (E)MOLEX 5557-2000 P=3.0, one piece package with label, RoHS  |
| I/O connector 2 cable (24-pin)   | 32124-003700-100-RS     | Round cable, integration cable, I/O cable, 300 mm, 22 AWG, (A)terminal block 8P P=5.08, (B)MOLEX 43025-2400 P=3.0, (C)D-sub 9P male, (D)phone jack 3.5_3P+NUT, (E)phone jack 3.5_5P+NUT, one piece package with label, RoHS |
| OS: Windows Embedded 7 (DVD-ROM) | IKARPC-07A-BT-WESTP-R10 | OS image with Windows® Embedded Standard 7 E for IKARPC-07A-BT Series, DVD-ROM, RoHS                                                                                                                                        |
| OS: Windows Embedded 8 (DVD-ROM) | IKARPC-07A-WE8S-R10     | OS image with Windows® Embedded Standard 8 E for IKARPC-07A-BT Series, WE8S license label, DVD-ROM, RoHS                                                                                                                    |
| Wireless kit                     | IKARPC-WIFI-KIT01-R10   | IEEE 802.11a/b/g/n/ac, Wi-Fi compliant / Bluetooth 4.0 + 3.0 HS Standard                                                                                                                                                    |
| WWAN kit                         | IKARPC-3G-KIT01-R10     | F260 3.75G module kit for embedded system, with Bluetooth V2.1, 2 x RF cable, 1 x antenna, RoHS, For IEI ATO only                                                                                                           |

## Packing List

| Item            | P/N                 | Qty | Description                                                                                                                                                                     |
|-----------------|---------------------|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ACC power cable | 32002-001900-100-RS | 1   | Round cable, power cable, 3000 mm, 16 AWG, (A) MOLEX 5557-04P P=4.2, RoHS                                                                                                       |
| GPS/GSM antenna | 32506-000100-100-RS | 1   | Integration antenna, GPS/GSM, RG 174, 5000 mm/5000 mm, PPF-5423SA5X-999, magnetic mount: $\phi$ 55 mm x 22mm, 1575.42 MHz/850 MHz/900 MHz/1800 MHz/1900 MHz, 2 x SMA plug, RoHS |
| Utility CD      |                     | 1   | User manual and driver CD                                                                                                                                                       |