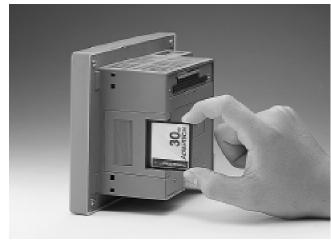# HMI-640S

Mini HMI PC with 6.0″ VGA Color STN LCD Display

NEW

Introduction

The slim PC HMI-640S comes fully equipped with a VGA STN LCD display. When combined with the touchscreen, it becomes a very user-friendly interactive interface for the end user. Being Windows CE compliant, the HMI-640S becomes an extremely compact HMI platform. This product features an all-in-one 486 PC board, on-board VGA, two COM ports (RS-232 and RS-232/422/485), 10/100Base-T Ethernet, CompactFlash™ adapter, external expansion slot for 16-bit PC/104 and touchscreen. With FCC Class A, and CE certifications, the HMI-640S is suitable for industrial and transportation applications.

Specifications

- **Construction:** Plastic molding with optional metal PC/104 expansion cover
- **CPU and core logic:** STPC Client 66 MHz, this is equivalent to a 80486 CPU
- **BIOS:** 256 KB Flash memory
- **RAM:** 32 MB EDO RAM on board
- **Disk drive housing:** Supports one CompactFlash™ adapter
- **VGA:** C&T69000 chipset on board with 2 MB DRAM, embedded panel resolution up to 1024 x 768 @ 64 K colors
- **Built-in Ethernet (LAN):** RTL-8139 10/100Base-T interface
- **Multi-mode parallel port:** Configured to LPT1, LPT2, LPT3 or disabled. Supports SPP/EPP/ECP, D-SUB 25-pin connector.
- **Serial ports:** One serial RS-232 port, one serial RS-232/422/485 port (DIP switch settings)
- **PS/2 keyboard/mouse connector:** Mini-DIN keyboard connector
- **HDD (optional):** Supports up to two EIDE devices, auto-detect BIOS
- **Expansion Slot:** Supports up to two cascaded 16-bit PC/104 cards with +5 V and +12 V only
- **Watchdog timer:** Adjustable period up to 62 seconds
- **Dimensions (W x H x D):** 197.5 x 142.8 x 63.4 mm (7.76" x 5.61" x 2.49")

- **Weight:** 1.5 kg (3.3 lbs)

LCD Display

- **Display type:** STN color dot matrix type LCD
- **Size:** 6.0″
- **Max resolution/color:** 640 x 480 @ 256 color
- **Dot size:** 0.043 x 0.619 (mm)
- **Luminance:** 70 cd/m^2
- **Viewing angle:** +/- 45° (H), -20°, +35°(V)
- **Response time:** 250 ms
- **Backlight:** one CFL tube

Power Supply

- **Output rating:** 25 W
- **Input voltage:** 18 ~ 30 V$_{DC}$
- **Output voltage:** +5 V @ 4 A, +12 V @ 0.5 A

Touchscreen

- **Type:** 4-wire resistive
- **Resolution:** 1024 x 1024
- **Light transmission:** 75%
- **Interface:** PS/2
- **Software driver:** Supports WINDOWS CE
- **Lifetime:** 3 million touches

Environmental Specifications

- **Operating temperature:** 0 ~ 45 °C (32 ~ 113 °F)
- **Relative humidity:** 0 ~ 95% RH (non-condensing),
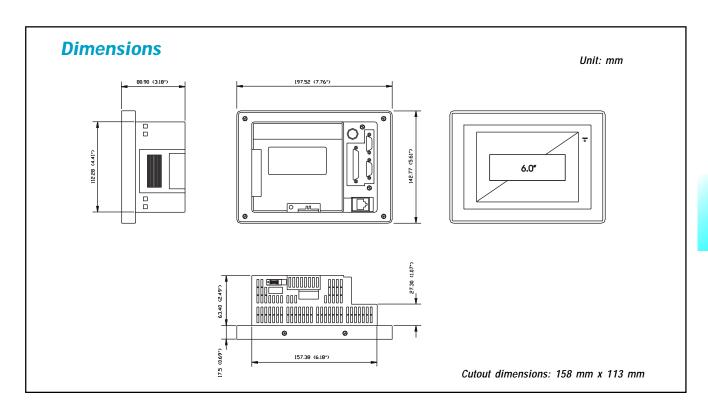- **Safety:** Meets UL/CSA
- **FCC Class A, CE approved**
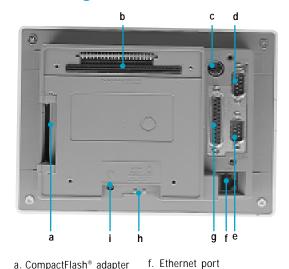- **Vibration:** 10 ~ 18 Hz, 1.5 mm peak-to-peak displacement 18 ~ 500 Hz, 1 G acceleration
- **Water resistance:** Front panel meets NEMA 4 or IP 65

C€ FCC

Dimensions

Unit: mm

80.90 (3.18") — 112.28 (4.41")

197.52 (7.76") — 142.77 (5.61")

6.0"

63.40 (2.49") — 27.30 (1.07")

17.5 (0.69") — 157.38 (6.18")

Cutout dimensions: 158 mm x 113 mm

I/O Arrangement

b   c   d

a   i   h   g   f   e

a. CompactFlash® adapter
b. PC/104 ISA slot
c. PS/2 keyboard and mouse connector
d. COM2 port
e. COM1 port

f. Ethernet port
g. Parallel port
h. 24 V$_{DC}$ input connector
i. LCD contrast

Application S/W Package

Advantech provides two application software packages by which users can easily build up their own graphic interface within several hours.

- ICONICS Pocket GENESIS CE
- Advantech GeniDAQ CE

Ordering Information

❑ **HMI-640S:**
486DX-66 PC with 6.0" STN LCD, 16MB EDO RAM on board

❑ **HMI-640S-GNI:**
Windows CE turn-key solution pack; HMI-640S with Advantech HMI S/W package (HMI-640S + 16MB CompactFlash™ card + Advantech HMI S/W package + Windows CE OS)

❑ **HMI-640S-IC0:**
Windows CE turn-key solution pack; HMI-640S with ICONICS Pocket GENESIS CE (HMI-640S + 16MB CompactFlash™ card + Pocket GENESIS CE + Windows CE OS)

❑ **PCLS-ICO-WCE:**
ICONICS Pocket GENESIS Windows CE Development Software (Including GraphWorX, TrendWorX and AlarmWorX)

❑ **PCLS-GNI-WCE:**
GeniDAQ Windows CE Development Edition (Including Task Designer and Display Designer)

❑ **PS-DC24-50:** 50 Watt DC 24 V Output Power Supply for HMI-640

❑ **PCD-100A-0016:** 16 MB CompactFlash™ Memory Card

❑ **PCD-100A-0032:** 32 MB CompactFlash™ Memory Card