

UNO-1140FH

**Class I, Division 2 Certified
486SX-grade SoC DIN-rail PC
with 1 x LAN, 8 x Isolated COM**

NEW



UNO-1140FH



Features

- UL listed for Hazardous Locations: Class I, Division 2
- Onboard Advantech EVA-X4150 486SX SoC
- 4 x isolated RS-232/485 and 4 x isolated RS-485 ports with automatic flow control
- Industrial-grade serial port design without data loss
- 1 x 10/100 Base-T RJ-45, 2 x USB 2.0, and 1 x internal CompactFlash®
- Compact size, small footprint, saves space
- Front-accessible I/O and DIN-rail design for easy installation in control cabinet
- Wide operating temperature range up to 75° C
- Windows® CE 5.0, DOS, and Linux ready solution
- Fanless design with no internal cabling
- Grounding isolation between chassis and system
- IP40 ingress protection

Introduction

In hazardous locations, devices are under potential danger from flammable gases, combustible dust, or ignitable fibers, creating the potential for fire and explosions. UNO-1140FH is designed to be safely operated in these locations and is UL listed for Hazardous Locations with Class I, Division 2, group A, B, C, D & T4A certification. UNO-1140FH is also DIN-rail mountable, providing several serial communication ports and Ethernet interfaces. With a compact size, small footprint and front accessible I/Os, UNO-1140FH is convenient for the control cabinet. The wide operation temperature and industrial serial port design makes UNO-1140FH a perfect communication gateway. With OS and driver support on WinCE, Linux, users can integrate applications easily with an application ready platform that can provide a versatile function to fulfill diverse requirements.

Specifications

General

- **Certifications** CE, FCC Class A, UL, CCC
- **Hazardous Locations** US: ANSI/ISA 12.12.01-2007 cUL: CSA 22.2 No. 213 M1987, Class I, Division 2, Groups A,B,C,D, Hazardous Location, Temperature code: T4A, Ambient Temperature Range: $-10^{\circ}\text{C} \leq T_{\text{amb}} \leq 60^{\circ}\text{C}$
- **Dimensions (W x H x D)** 71 x 152 x 139 mm (2.8" x 6" x 5")
- **Enclosure** Aluminum + SECC
- **Mounting** DIN-rail, Wallmount
- **Industrial Grounding** Isolation between chassis and power ground
- **Power Consumption** 10 W (Typical)
- **Power Requirement** 10 ~ 30 V_{DC} (e.g. +24 V @ 1 A) (Min. 24 W), AT
- **Weight** 1 kg
- **OS Support** DOS, Windows CE 5.0/6.0, Linux
- **System Design** Fanless design with no internal cabling
- **Remote Management** Built-in Advantech DiagAnywhere agent on Windows CE

System Hardware

- **CPU** Advantech EVA-X4150 SoC, 486SX grade, 150MHz
- **Memory** Onboard 64 MB Industrial grade SDRAM
- **Indicators** LEDs for Power, CF, LAN (Active, Status) and Serial (Tx, Rx)
- **Keyboard/Mouse** 1 x PS/2
- **Storage** CF: 1 x internal type I/II CompactFlash® slot
- **Display** DB15 VGA connector, supports up to 1024 x 768 @ 60 Hz
- **Watchdog Timer** Programmable 256 levels timer interval, from 1 to 255 sec

Environment

- **Ingress Protection** IP40
- **Operating Temperature** IEC 60068 - 2-2 (with 100% CPU/ I/O loading) -20 ~ 75°C (-4 ~ 167°F)
- **Operating Humidity** 20 ~ 95% (non-condensing)
- **Shock Protection** IEC 60068 - 2-27 CompactFlash®: 50 G @ wall mount, half sine, 11 ms
- **Vibration Protection** IEC 60068 - 2-64 (Random 1 Oct./min, 1hr/axis.) CompactFlash®: 5 Grms @ 5 ~ 500 Hz

I/O Interface

- **Serial Ports** 4 x isolated RS-232/485 with DB9 connectors, 4 x isolated RS-485 with screw terminal, Automatic RS-485 data flow control
- **Serial Port Speed**
COM1~COM4 RS-232 : 50~115.2 kbps
RS-485 : 50~115.2 kbps
COM5~8 RS-485 : 300~921.6 kbps (max)
- **Serial Port Protection** 500V_{DC} Isolation Protection
2000V_{DC} EFT Protection
- **LAN** 1 x 10/100 Base-T RJ-45 port
- **USB** 2 x USB, USB 2.0 compliant

Ordering Information

- **UNO-1140FH-V10E** CID2 EVA SoC DIN-rail PC, 64MB RAM, 8x Iso. COM

Accessories

- **UNO-FPM11-BE** UNO-1100 series VESA mount kit
- **PCLS-DIAGAW10** Advantech Remote Monitoring & Diagnosis Utility