WTPE Panel PC Series

WTPE-9E66-15W (Front)

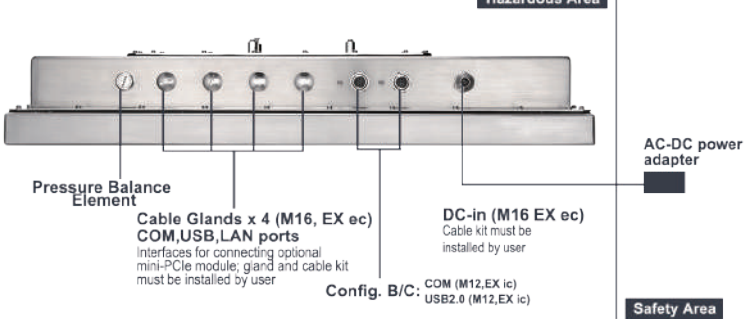WTPE-9E66-15W (Back)

I.O. Configuration A,D

Hazardous Area

Pressure Balance Element
Cable Glands x 4 (M16, EX ec)
COM,USB,LAN ports
Interfaces for connecting optional mini-PCie module; gland and cable kit must be installed by user

DC-in (M16 EX ec)
Cable kit must be installed by user

AC-DC power adapter

Config. A: COM x 2 (M12,EX ic)
Config. D: USB2.0 x2 (M12,EX ic)

Safety Area

I.O. Configuration B/C

Hazardous Area

Pressure Balance Element
Cable Glands x 4 (M16, EX ec)
COM,USB,LAN ports
Interfaces for connecting optional mini-PCie module; gland and cable kit must be installed by user

DC-in (M16 EX ec)
Cable kit must be installed by user

AC-DC power adapter

Config. B/C: COM (M12,EX ic)
USB2.0 (M12,EX ic)

Safety Area

WTPE Series Selection Guide

ATEX, C1D2, IECEx Explosion Proof Panel PC Series			
Product Name	WTPE-9E66-15W	WTPE-9E66-19W	WTPE-9E66-22W
Main System			
CPU/ Graphics	Intel® 6th gen. Core i7/i5/i3 processor 15W max./ Intel® integrated HD Graphics 520 by CPU		
Memory	up to 32GB		
OS support	Windows Embedded 7 / Windows 7 Professional		
Display & Touch Panel			
Size	15"	19"	21.5"
Resolution	1024 x 768 (XGA)	1280 x 1024 (SXGA)	1920 x 1080 (FHD)
Color Numbers	16.7M	16.7M	16.7M
View Angle (H/V)	160/160	170/160	178/178
Contrast	600:1	1000:1	5000:1
Brightness (nits)	450	350	300
Touch Panel	Full Flat Resistive Touch		

IO & Power				
	Configuration	A	B / C *	D
I/O Ports	Swappable M12, 8pin (I.S. Output, Support EX ic, Extension Cable to Ex ic Devices)	COM X 2 for RS232	USB2.0 X 1 COM X 1 for RS232	USB2.0 X 2
	Cable Gland M16 (Max. Output x 4, Must be Installed by User)	USB 2.0 X 2 (EX ec), LAN X 2 (EX ec, i219LM for Vpro), COM X 1 for RS232/422/485 (EX ec), Optional Mini-PICe Module for Cable Connection X 1 (EX ec)		

Power Adapter	100W with 24V DC output, with 1.2M cable, PSE		
Power Consumption	DC 24V Input, M16 (EX ec, Must Be Installed by User) / 46.7 Watts		
Storage & Expansion			
Storage	128G SSD		
Expansion slot	Mini PCIe x 1 M.2 Type E x 1	Mini PCIe x 1 M.2 Type E x 1	Mini PCIe x 1 M.2 Type E x 1
Mechanical & Environmental			
Weight (kg)	11	12.4	13
Operating Temp.	-20~60°C		-10~55°C
IP rating	IP66 / NEMA4X		
Cooling	Fanless		
Power			
Power Input	1 x gland DC power		
Power Adapter	100W AC-DC power adapter with 24V DC output, 1.2M cable, PSE		
Power Consumption	46.7W	53.5W	54.2W
Certification			
Certification	EMC: FCC, CE (EMC), VCCI Class B Safety: IEC-62368, CCC IECEx, Class 1 Division 2 Group A, B, C, D T5, ATEX Zone2 EX II 3G Ex ic ec IIC T4 Gc IP66		

*Remark: Configuration B/C is defined/verified as different interface combination connected in certificate report.

About Wincomm Corp.

Wincomm is one of Taiwan's leading manufacturer of industrial computer and embedded computer products. Wincomm designs and develops all in one panel PC, large size all in one digital signage system, rugged box PC and embedded software products for a broad range of industries and applications. Wincomm aims to provide hardware and software integrated solutions for the most variant environments such as industrial automation/ human machine interface control, digital signage / infotainment Kiosk, and medical computing.

Application

Petrochemical Industry

Oil & Gas Factory

Explosion Proof

# WTPE Series

Explosion Proof ePlatform Solutions

ISO 14001:2015

When Will an Explosion Occur?

As a rule, the explosion can be occurred when three elements exist. The basic principle for explosion proof protection is to eliminate one or more legs of the explosion triangle.

- **Flammable material:** can be a gas, vapor or dust in sufficient quantities.
- **Source of ignition:** any source of energy, e.g. a spark or high temp etc.
- **Oxygen:** usually present

Flammable Substances
Ignition Source
explosion
Oxygen

Zone2
Zone0
Zone1
Zone0
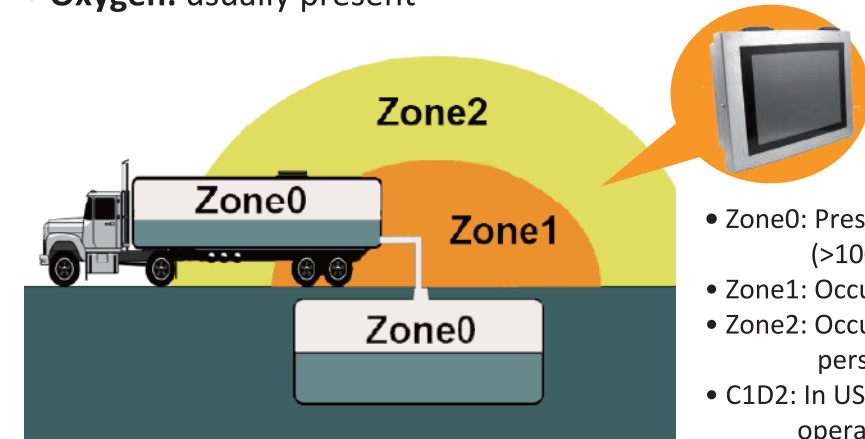
- Zone0: Present frequently, continuously, or for long periods. (>1000hrs./yr)
- Zone1: Occur in normal operation occasionally.(<1000 hrs./yr)
- Zone2: Occur in normal operation, but if it does occur, will persist for a short period only.(less than 10 hrs/yr)
- C1D2: In US, it certified that WTPE series could secure safe operation under flammable or explosive gases/ vapors, potential environments.

Why Explosion Proof Panel PC

Easy installation via cable gland and connector panel, flexible & max support to 4 ports.

Swappable M12 USB/COM connectors for hazard area installation.

Expansion Design

15"
19"
21.5"

Size from 15" to 21.5" TFT LCD

Full Range of LCD Size

Front IP66
IIP66 water/ dustproof

Touch Lock
Touch on/off for hygienic cleaning

60°C
-20°C
Wide Temp. -20 ℃~60 ℃

Robust Antenna

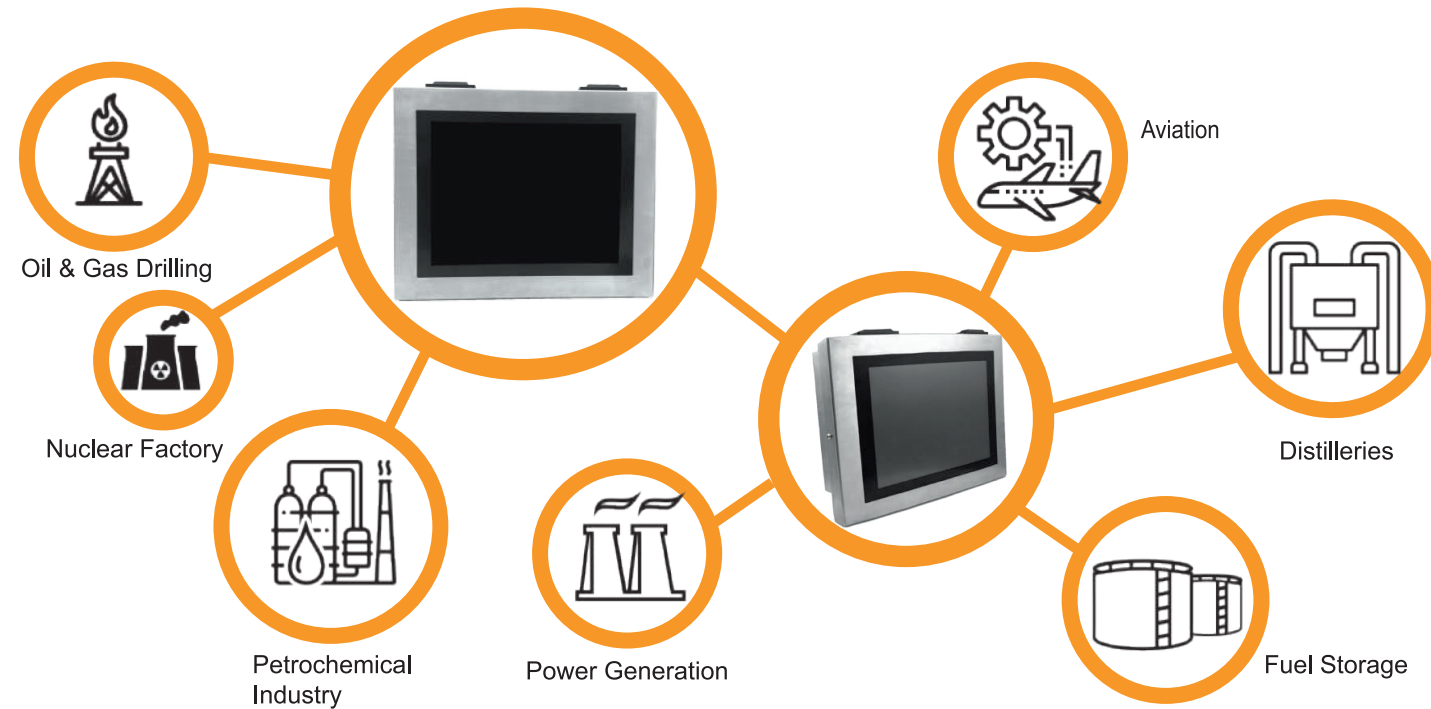**Harsh Environment Solution**

Ex ATEX
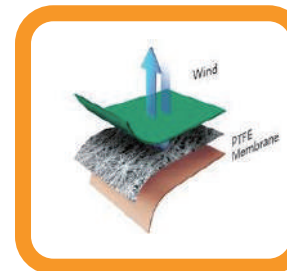CE
VCI
IECEx
FC
Class B

High Quality & Customize Service

The Explosion Proof Panel PC series are built to suit for hazardous environments, undergoing rigorous testing to ensure safety and top performance. It is capable of withstanding vibration, shock, corrosion and can operate under the condition of exposure to gas and vapor. All of the models in the Explosion Proof Series are sealed to at least IP66 standards offering the best solution for environments with explosion considerations. The Explosion Proof Panel PC works well in oil & gas industry, chemical manufacturing, power generation, distilleries and other hazardous industrial applications. Wincomm takes our users concern to meet ATEX Zone 2 / IECEx / C1D2 certificate and WTPE series provide extremely safty design to fulfill Ex-area application requirements.

Wincomm Explosion Proof Panel PC Series Applications

Oil & Gas Drilling

Nuclear Factory

Petrochemical Industry

Power Generation

Aviation

Distilleries

Fuel Storage

Equipments Monitoring

All data from pipe/ tank or equipment would be inspected or monitored and the information would be collected for adjustment or maintenance.

Real-time Controlling

In gas, oil industry or hazardous environments, real time controlling for power on/off and any other emergency maintanence via explosion proof panel PC is exactly required.

Data Exchanging & Collection

To collect data from dangerous field, operators could get all information of equipment temp, air pollution rate etc. to communicate other operated field without showing up.

Central Control Room

With 24/7 operation and high performance CPU, central control room is presented to deal with any situation and communication.

Features Highlight

Powerful thermal solutions with stable CPU operation

1. Fanless cooling by high heat efficiency heat pipe and large heat dissipation heatsink, optimal MB power design to maximize power efficiency and minimize heat generation.
2. PTFE ventilation film to exhaust hot air for air pressure balance to avoid stainless steel case deformation; enclosure IP grade is still effective.

Wind
PTFE Membrane

Extremely evironment solution: wide range temp & water/dust proof

With special selected key components (ex. LCD, RAM, Storage, power module ...), large heat dissipation heatsink and Wincomm "pre-heating control system", WTPE products could be 24/7 operation under -20~60°C.
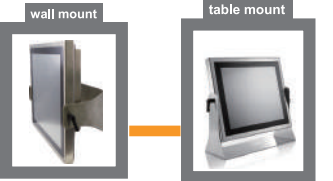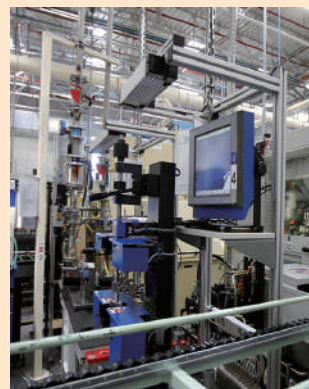
No corrosion after long-term usage
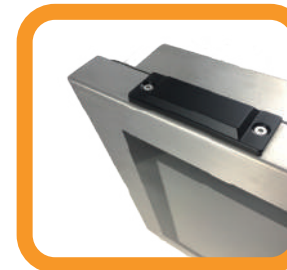
With dedicated designs in
- Stainless steel covers, glands and screws
- Robust connectors, seals, antenna covers
- Touch screen bonded with LCD
- Low power circuit in COM and touch screen
WTPE series can be guaranteed no corrosion after long-term usage.

Saving space by downward I/O design

With minimized outside dimensions and downward external IO, it doesn't occupy but saving space.

wall mount
table mount