HP Thin Clients for Specific-purpose and Embedded Computing

HP Thin Clients are world-class computing devices. While they are commonly used as access devices to cloud and client virtualization infrastructure (VDI), they are also highly suitable and capable of being used in many other specific-purpose or embedded computing use-cases.

What is an HP Thin Client?

An HP Thin Client is indeed a *computer*, as it has all the necessary elements of being a proper computer: processor, memory, storage and operating system. They enable it to run applications locally and perform data processing. However, a thin client is different from a *personal computer* (PC), which aims to improve the user's personal productivity. Instead, a thin client is a device to increase *work productivity* for *task-oriented* and *specific or single-purpose* use-cases or users. Think of thin client as a *task computer*.

Specific-purpose use-cases

Customers can and have used HP Thin Clients in many different specific-purpose use-cases in many different industries. In these implementations, the applications can be run in

the cloud or locally on the device. While a thin client has local storage, most implementations will store the data centrally in the cloud or server and not locally (except for some temporary and transient data).

Manufacturing

A semiconductor and LCD panel manufacturer in China uses HP Thin Clients to run its production lines inside a clean room. It requires a fan-less device to ensure that there is no unnecessary air circulation inside its clean room

A large MNC factory in Singapore uses HP Thin Clients to operate its factory monitoring system, which is a web-based application running off a server to read the various sensors and valves in the factory.

An electronic factory in Indonesia planned for expansion but found out that it could not get additional electrical power to the plant. After an internal energy audit, the company replaced PCs with HP Thin Clients for its factory production lines and saved enough capacity to power two new production lines.

Specific-purpose or embedded computing explained

We have come to associate a computer with a *personal* computer.

A *personal* computer is typically used to increase personal productivity. It can be used to run many different applications to achieve many different purposes. Its use-case is typically personal and flexible.

However, there are many use-cases that are not personal nor flexible. For example, a computer to run a kiosk will just run the same application(s) to serve the same specific purpose throughout its service. This is also true for computers used in factory automation or in restaurant kitchens. In these cases, the computer is used for specific-purpose or embedded computing.

Information display and digital signage

Our partner, Wallflower Ltd, has deployed HP Thin Clients as digital signage and information display systems in many different settings such as in restaurants, shopping malls, shops and others.

Some airports in China have used HP Thin Clients to drive the flight information display system. HP Thin Clients with fibre-optic network interface[1] is an ideal solution for airports (or other transport nodes) due to its sheer geographical size.

Kitchen Video System

HP Thin Clients is certified by a global fast food restaurant for use in its kitchen to route and fulfil orders. Its certification takes into consideration kitchen environmental requirements such as temperature, humidity and oil vapor.

Information and Self-Service Kiosks

A bank can use HP Thin Clients in self-service kiosks (inside or outside branch) for customers to check their accounts and perform some secure transactions.

Libraries can use HP Thin Clients to provide web-based access to search catalogs and facilitate book reservation and borrowing.

Internet cafes, hotel lobbies, and airport lounges ideally use HP Thin Clients to provide web-based access to internet, to do online flight check-in.

Fast food restaurants can use HP Thin Clients to run its self-order kiosks. Integrated with touch screen, payment terminal and the kitchen system, it offers a robust system inside the kiosk enclosure.

HP Thin Clients' Value Proposition

Key attributes of HP Thin Clients make it a suitable device for specific-purpose or embedded computing.

Fan-less design: reliable and completely silent

HP Thin Client is typically fan-less. It does not suck in nor circulate air into its surroundings, making it ideal either in dirty environments or in clean room deployments. At the same time, it keeps it very quiet and increases reliability.

Energy-efficient and low heat dissipation

HP Thin Clients is energy efficient, consuming less power than a traditional PC. This is ideal for cool-room deployments or sites with limited electricity capacity.

Compact design

The slim, compact, design of HP Thin Clients makes it easy to mount inside other devices (such as kiosk) or behind display screens.

Drive multiple screens

A single HP Thin Client can drive 2, 4 or 6 display screens, each up to 4k resolution[2].

Support for fiber-optic networks

HP Thin Clients support fiber-optic network interfaces[1] (FNIC) that may be required for installation in large areas or buildings such as factories, airports, convention-centres, or parks. Fibre-optic network offers fast, secured, low latency and long-distance nodes.

Embedded operating system

HP Thin Clients run on Linux® or Windows® Embedded operating system, with enhanced security and smaller OS footprint.

Device-level management

HP Thin Clients are highly manageable remotely, a useful feature to manage the installation in dispersed locations such as airports or shopping malls.

Warranty and worldwide support services

HP Thin Clients carries a 3-year limited warranty and HP provides peerless post-sales support and services worldwide.

Learn more at
hp.com/go/thin

The reliable thin client is a perfect driver for specific-purpose and embedded computing
HP Thin Clients are suitable for such systems due to their higher reliability, security, device-level management and being backed up by a 3-year limited warranty and unmatched world -class service and support.