

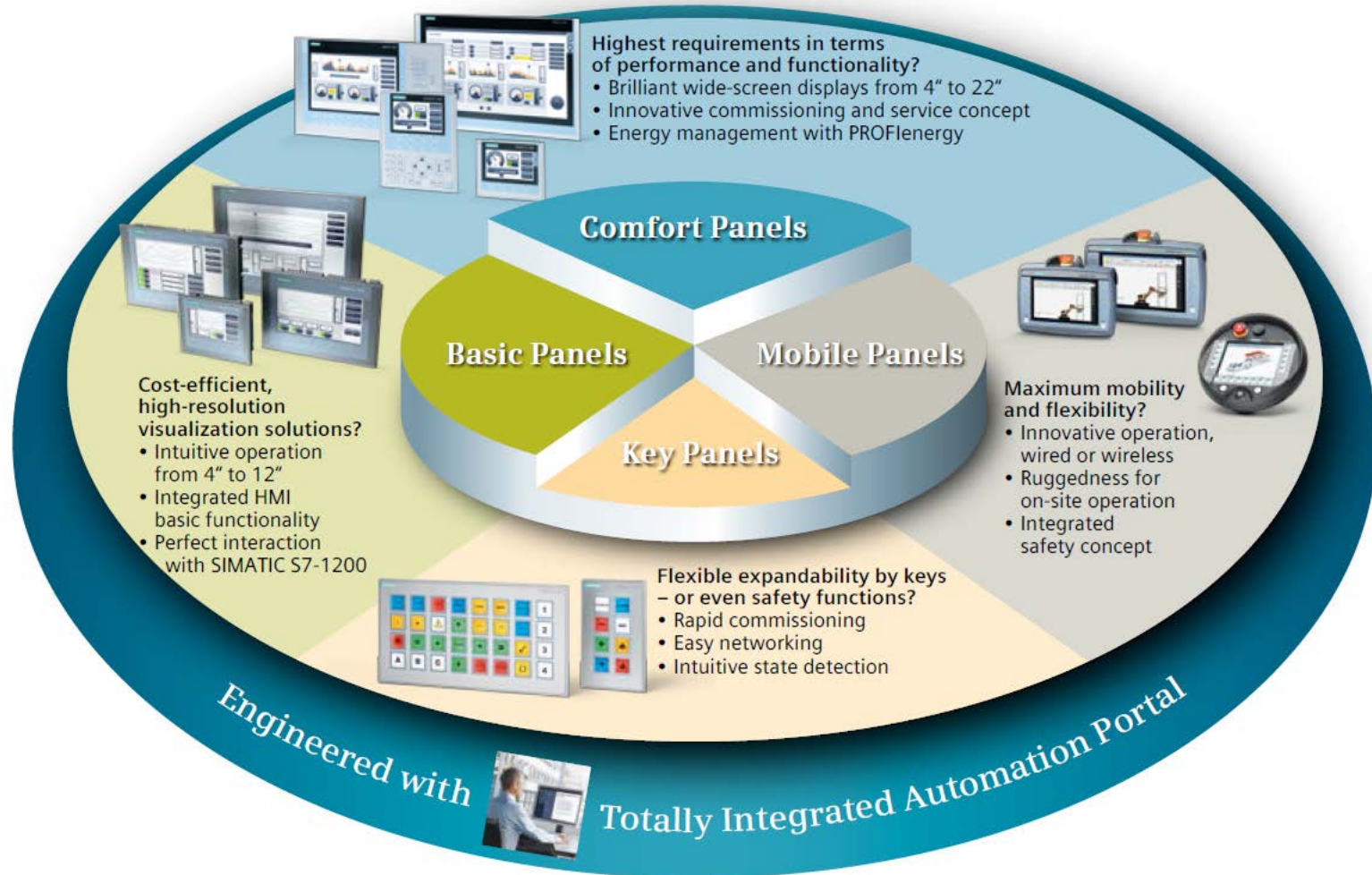


Universal Connectivity with Siemens HMI

Kelly Anton




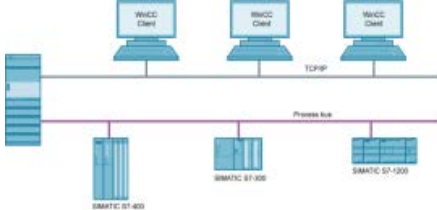
Professional Control Corporation

Siemens HMI Family Introduction



HMI Software TIA Portal

Same look and feel between all Editions of WinCC software in TIA Portal

Engineering Edition	WinCC Professional			
	WinCC Advanced			
	WinCC Comfort			
	WinCC Basic			
Devices	Basic Panels	Comfort Panels, Mobile Panels	Panel PCs	SCADA
				



Selection Based on Size or Keys



**Touch from 4" to 22"
Key devices from 4" up to 15"**

**Archives, scripts, Internet Explorer, PDF/Excel/Word viewer,
Media Player, F(x) – functions, system diagnostics viewer, ...**



All Comfort Panels offer the same high-end functionality over all display sizes.

Data and System Slots



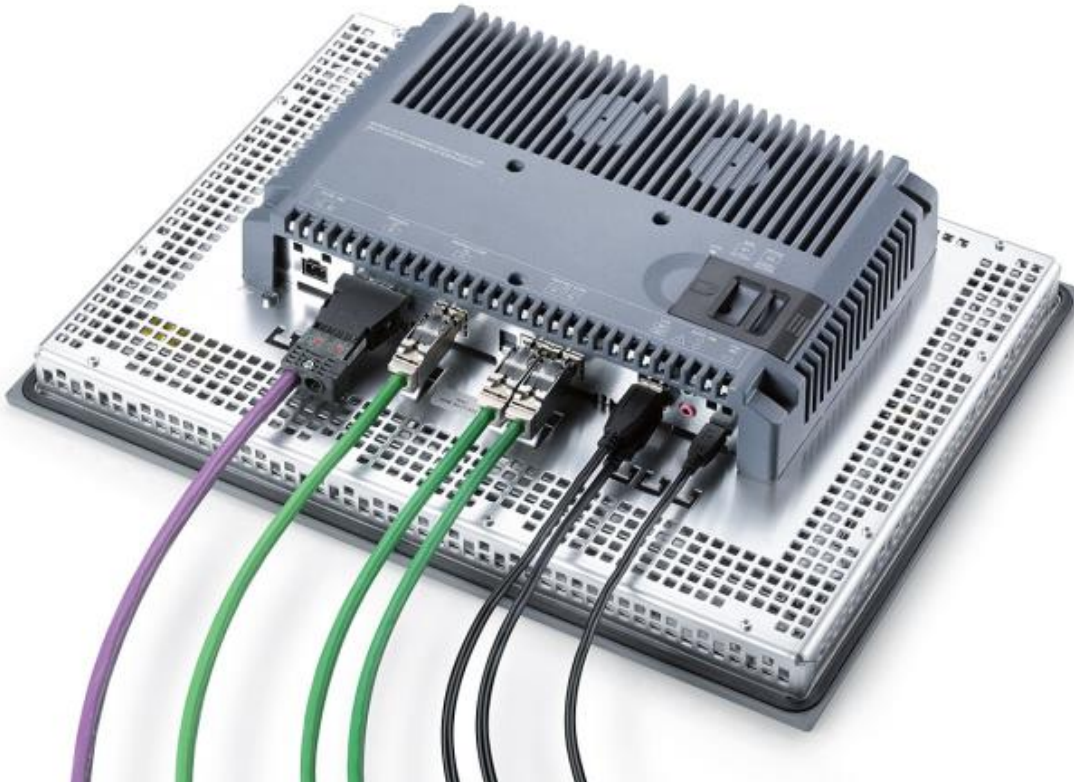
“Data” slot for archives and other data

- Maximum data security for archives in RDB format. Store archive data and files

“System” slot for automatic backup

- Fast device exchange with SIMATIC Card
Insert card ⇒ confirm message ⇒ done

Comfort Panel Interfaces



Interfaces available for:

PROFIBUS / MPI / Serial

PROFINET / Ethernet

USB host (flash, kbd...)

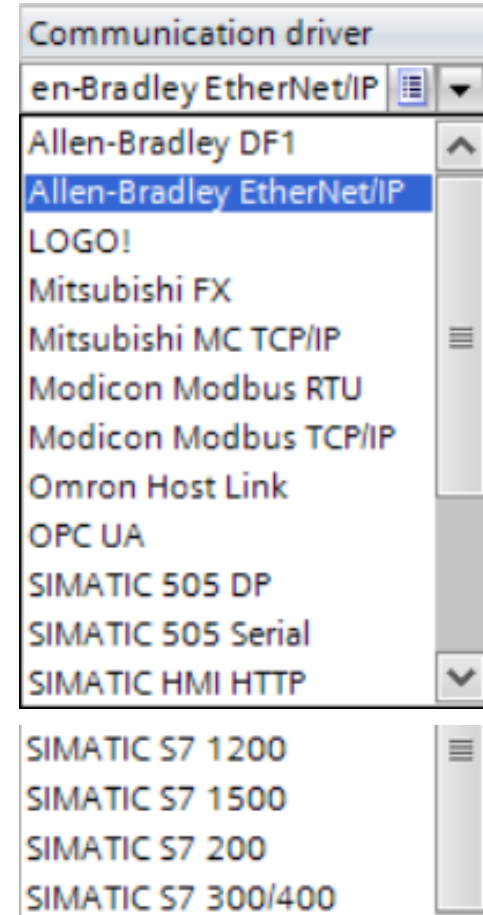
USB client (transfer)

Audio

Various communication possibilities by standardized interfaces

Communication Drivers

- **Built in drivers for:**
 - Siemens PLC's
 - 3rd party PLC's such as Ethernet/IP
- **Multiple drivers at same time.**
- **Channel Support Packages (CSP) – TI**
- **AB Tag Converter Available**
- **Siemens 422/485 to 232 converter**



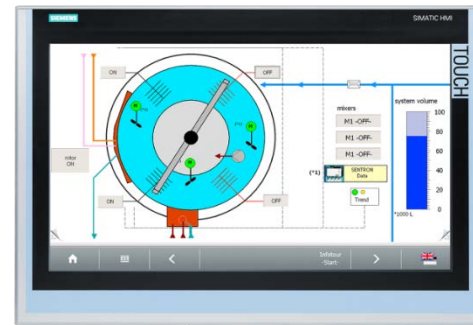
OPC UA Server

- Make HMI tag data available upstream.

PC Running WinCC
Advanced Runtime
as OPC UA Client

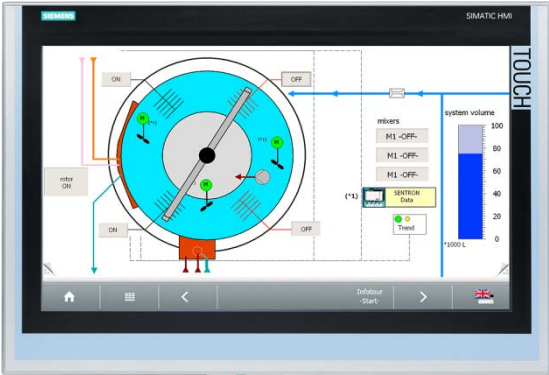
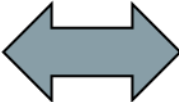
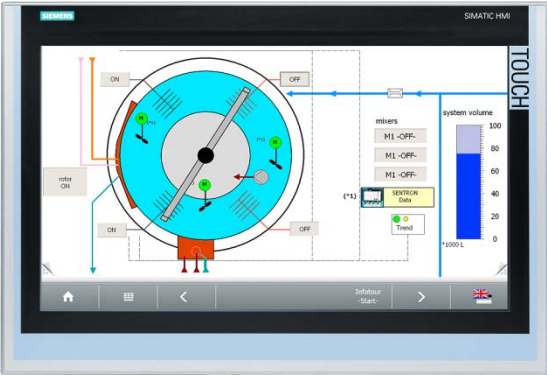


Comfort Panel as
OPC UA Server



HTTP Driver

- HMI to HMI Tag Sharing



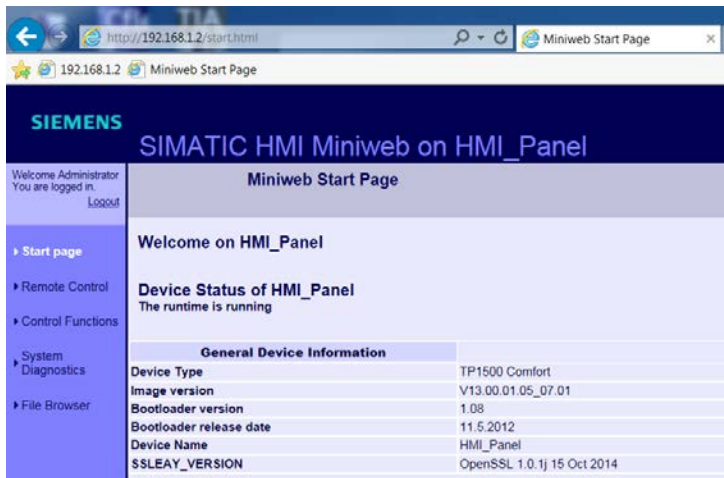
Ethernet HTTP Driver

Shared Serial Connection

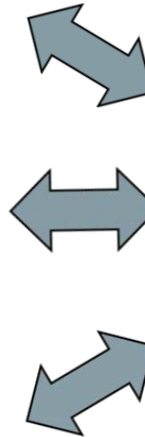


Panel Web Pages and Sm@rtServer

- HMI as Web Server
- Web Browser, SmartClient.exe & Sm@rtClient view



Clients

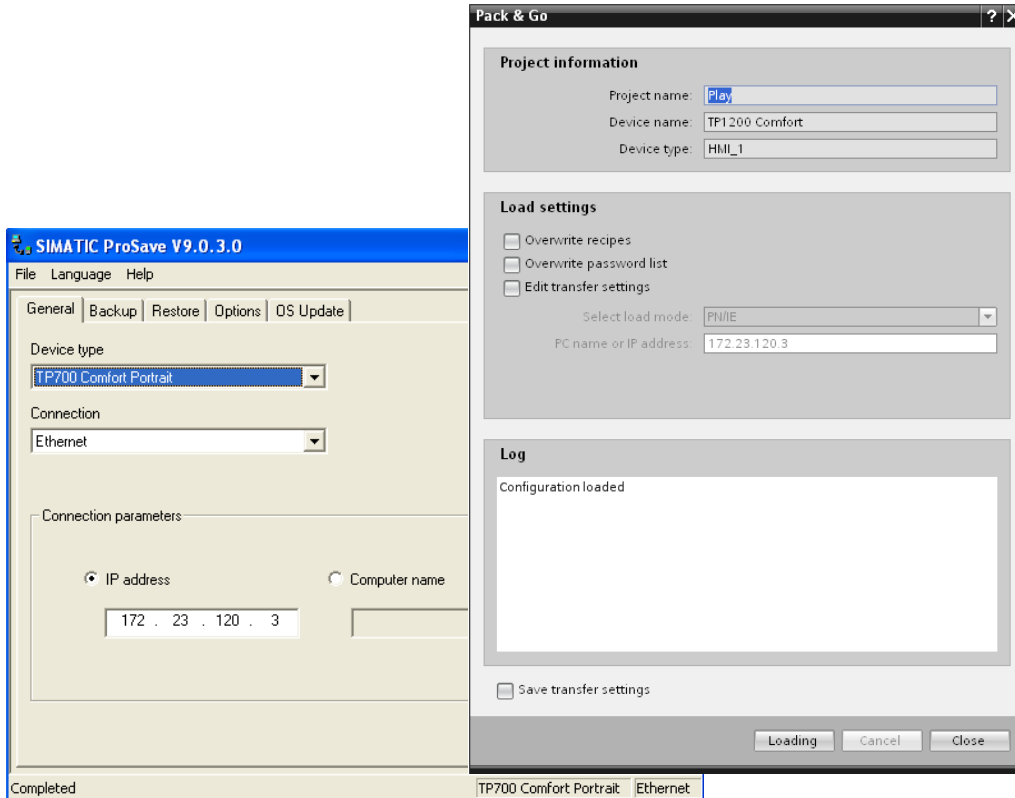


Web Server

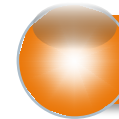


Sm@rtServer

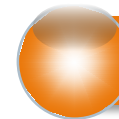
Service and Commissioning



Service tools available:



ProSave



Pack & Go

Free tools that can save a trip.

Camera Control

- Ethernet Camera Streaming Protocols
 - RTP/RTSP
- Video Formats:
 - H264
 - MPEG4
 - MJPEG



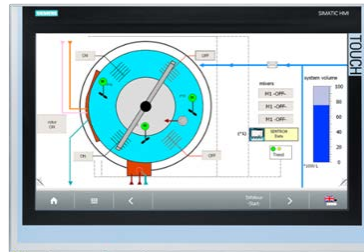
HMI Features

Alarm System

VB Scripting

Reporting

Historical Archives



Faceplates

Core Functionality

Libraries

Recipes

Scheduled Tasks

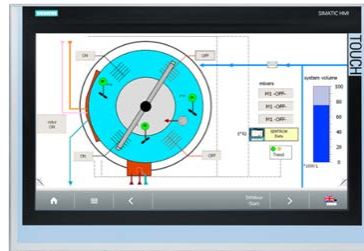
Cross Reference

HMI Options

Audit

Sm@rtServer

Simatic
Logon



Options

License
PowerPacks

Software
Update
Service

Upgrades

Live Demos

- **AB Tag Converter Demo**
- **Show Runtime Simulation on Development PC**
- **S7-1500 System Diagnostics Viewer**
- **Comfort Panel Web Pages and Sm@rt Server**
- **OPC UA Server to Kepware OPC UA Client Driver**