

FUTRO S Series

Reliable computing without any restrictions



Why take a fully featured PC for server based computing, when you can have everything you need in a reliable small form factor thin client?

The FUTRO S Series is ideally suited for Windows Terminal Server computing. The server executes the applications, the screen is displayed on the client. Your data is saved secure on the server and is therefore protected against loss. Also the operating system is stored secure on a flash memory and safe from unauthorized changes due to a write protected file system. Smart administration tools help to update the client easily.

Without fan and rotating drives, the FUTRO S Series is reliable, fail-safe and silent.

All that turns the FUTRO S Series into a minimizer of Total Cost of Ownership.

Accessibility

- Embedded Linux (eLux NG) or Windows XP Embedded (XPe) operating system with ICA / RDP protocol and terminal emulations
- TCP/IP network integration with DNS and DHCP support
- 10/100 Mbit/s Ethernet LAN controller with PXE bootcode on board
- Support for analogue WAN connectivity via optional USB devices (eLux only)
- Support for ISDN WAN connectivity
- Variety of browsers including Java Virtual Machine for direct internet connection (depending on OS)
- Support of extended memory with MEMORYBIRD, external USB floppy drive and a wide range of Fujitsu Siemens Computers' keyboards

Reliability

- Cost-optimized and trusted solution for displaying and running Windows applications
- Approved by Microsoft Terminal Server and Citrix MetaFrame 1.8 / XP
- Highest quality design and function stability

Manageability

- Simple network administration: programs and data are on the server
- Easy configuration, administration and system monitoring via optional tools
- Cost-effective remote administration via SNMP and DHCP standard protocols
- Manageability tool SCOUT NG for embedded Linux solution
- Altiris® Deployment Solution™ for clients integrated in Windows XP Embedded solution

Security

- Secure operating system embedded on flash memory
- Comfortable security support for SmartCard integration in connection with Citrix MetaFrame
- Secure data transaction via VPN available
- Access protection through Fujitsu Siemens Computers' USB keyboard with integrated SmartCard reader

Ergonomics

- Space saving through vertical usage and small footprint
- Stress-free working and silent operation without any rotating fan and drives
- Low power consumption, low heat dissipation

Inform

www.fujitsu-siemens.com



Operating systems and software

eLux NG - Embedded Linux eLux NG is a Linux based embedded operating system, specially developed for use in FUTRO to apply as thin clients in server-based environments.	Windows XP Embedded Windows XP Embedded is the modulated version of the desktop operating system Windows XP Professional, enabling development of reliable and full-featured connected devices.
Target group From Small Enterprises to Large Accounts	Target group Ideally suited for medium and large enterprise customers with decentralize system configurations and branch offices
Local functions <ul style="list-style-type: none"> ICA-Client V 8.0 RDP-Client V 5.2 functionality Mozilla Browser Opera Browser Acrobat Reader Tarantella-Client Terminal emulations for ANSI, 97801, VT320 X.11 terminal application Local SAP GUI 4.6 on 128MB or 256 MB Flash Local functions requiring further licenses <ul style="list-style-type: none"> IBM 3270 / 5250, FSC 9750 emulation, additional license necessary, available from UniCon 	Local functions <ul style="list-style-type: none"> ICA-Client V 8.0 RDP-Client V 5.2 Internet Explorer V 6.0 Acrobat Reader V 4.05 Media Player V 6.4 Windows Installer HOB emulation suite (Option) Altiris® Deployment Solution™ for clients
Options available Integration of additional features like Wireless LAN support, remote administration, printer support, VPN and Firewall Support will be offered by Fujitsu Siemens Computers made4you program	Options available Integration of additional features like Wireless LAN support, remote administration, printer support, VPN and Firewall Support will be offered by Fujitsu Siemens Computers made4you program
Manageability with SCOUT NG (license required, evaluation right for up to 3 seats): <ul style="list-style-type: none"> FUTRO utility tool for embedded Linux <ul style="list-style-type: none"> Flash memory management Embedded operating system update and system monitoring Managing devices by location, group or user Individual operating system composition with ELIAS 	Manageability <ul style="list-style-type: none"> Altiris® Deployment Solution™ for clients preinstalled
Security <ul style="list-style-type: none"> SmartCard support 	Security <ul style="list-style-type: none"> Driver for SmartCard reader hardware
VPN <ul style="list-style-type: none"> VPN client from Cisco (license required) VPN client Free S/WAN 	
Wireless LAN <ul style="list-style-type: none"> Internal WLAN device from Cisco (optional) 	Wireless LAN <ul style="list-style-type: none"> Internal WLAN device from Creatix (optional)

System	FUTRO S210	FUTRO S220	FUTRO S230
System memory (MB),DDR SDRAM	128	128	256
Flash memory (MB), Compact Flash Card	32	128	256
Operating System	eLux NG	eLux NG	eLux NG, XPe

Operating Systems / Software

Windows XP Embedded or eLux NG on flash memory
If the ICA protocol is selected, the MetaFrame® server Software from Citrix is required (optional).

Mainboard

Processor Crusoe TM5800 800 MHz

Interfaces

1 x serial (9-pin, 16-byte FIFO, 16550-compatible)
1 x parallel (25-pin, with EPP and ECP) for printing via ICA protocol (local and / or over network)
1 x keyboard (PS/2) (rear)
1 x mouse (PS/2) (rear)
1 x monitor (15-pin, VGA)
1 x LAN RJ-45
1 x audio out 1/8-inch mini
1 x Headphone out
1 x micro 1/8-inch
4 x Universal Serial Bus (USB 2.0);
2 x in front panel, 2 x rear side
1 PCI Slot midsize (Option via customizing)

Display modes

VESA monitor support with DDC for automatic setting of resolution and refresh rate

Video RAM 32 MB integral in main memory

Resolution selectable

32 bit colors, max	1600 x 1200 / max 85 Hz
32/16/8 bit colors	1280 x 1024 / max 85 Hz
32/16/8 bit colors	1024 x 768 / max 120 Hz
32/16/8 bit colors	800 x 600 / max 160 Hz
32/16/8 bit colors	640 x 480 / max 160 Hz

Network

LAN on board 10/100 Mbit/s Fast Ethernet
Connectivity TP (Twisted Pair), RJ-45

TCP/IP with DNS and DHCP

Point-to-Point protocol

Supported Citrix Load Balancing over ICA

SNMP support allows configuration of terminal settings, reporting of terminal configuration and attached devices, traps

DHCP support for automatic firmware upgrades and unit configuration

Multiple master browser support on ICA

Audio

On board

Output: full 16-bit stereo sound, AC'97 codec

Input: 8-bit mini microphone

Electrical values (internal AC/DC power supply)

Rated voltage 100 - 240 V

Rated frequency 50/60 Hz

Max. Power consumption 0.7 A

Power consumption for standard configurations with XPe

Peak (running application) 15.9 W

Average (running OS, Idle mode) 10.1 W

Minimum (ACPI status S5, soft-off) 2.3 W

Temperature / dimensions / weight

Ambient temperature 15°C to 32°C to IEC 721

Dimensions with stand

(H x W x D) 246 x 68 x 177 mm

Dimensions without stand

(H x W x D) 246 x 48 x 177 mm

Weight

1.5 kg

Compliance with standards

Product safety IEC60950, EN60950, UL60950, CAN/CSA-C22.2 No.60950-00

Electromagnetic Compatibility EN55022 class B, EN55024 EN61000-3-2/-3, FCC class B, ICES-003

CE-Certification according to EC Directive 89/336/EEC 73/23/EEC

Environmental compatibility EPA-compliant

Security functions

Security functions implemented in the cabinet:

- Access protection via external SmartCard reader (optional)
- Write-protect facility for Flash EPROM
- Kensington Lock at rear side

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