

# DATA SHEET

## FUTRO S450

Issue: August 2009

The low-priced high-end thin client

### FUTRO S450

The small but powerful FUTRO S450 is your ideal client for server-based computing and virtual workplace solutions with RDP or ICA protocol, as thin client for Windows terminal services or as Java-based network terminal. Low power consumption, no fans nor rotating drives make your system a reliable and quiet thin client.

#### Green technology

Your company's contribution to environmental protection

- A modern, environmentally conscious product concept - from development to recycling

#### Relaxed working

Quiet system for a pleasant working environment

- Flash memory and passive cooling concept

#### Energy efficiency

Saves energy and reduces CO2 emissions

- Integrated system concept with high-level power-saving components

#### Security

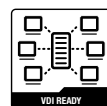
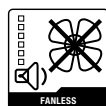
Prevents the installation of non-licensed software and virus infections

- Write-protected file system which can be written by the administrator as required

#### Backpack solution

Fewer cables and less space needed

- The FUTRO S450 can be mounted behind the screen



## Components

<b>Memory modules</b>	1 GB (1 module(s) with 1 GB) DDR2, 667 MHz
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<b>Hard disk drives (internal)</b>	CF module IDE, 256 MB empty
	CF module IDE, 512 MB empty

<b>Base unit</b>	<b>FUTRO S450</b>
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### Operating system / Software

Operating system	eLux® RL - Embedded Linux
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Notes	eLux® RL - Embedded Linux is a Linux based embedded operating system, specially developed for use in FUTRO to apply as thin clients in server-based environments.
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Functions	ICA-Client (incl. connection broker) RDP-Client functionality Browser Mozilla, Opera or Firefox available Acrobat Reader Tarantella-Client Terminal emulations for ANSI, 97801, VT320 X.11 terminal application Local SAP GUI (optional, provided by UniCon Software Development) IBM 3270 / 5270, Fujitsu 9750 emulation (additional license requested, provided by UniCon Software Development)
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Options available via customizing	Wireless LAN support Remote administration Printer support VPN support Firewall support
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Manageability	Scout EP V10, Flash memory management, Embedded operating system update and system monitoring, Managing devices by location, group or user, Individual operating system composition with ELIAS (only with eLux® RL)
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VPN (Linux)	VPN client from Cisco (optional, provided by UniCon Software Development, license required)
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### Mainboard

Mainboard type	D2703-B
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Formfactor	miniITX
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Processor	AMD Sempron™ TF20 (800 MHz, 128 KB)
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Chipset	AMD M690E
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Processor socket	embedded
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Processor quantity maximum	1
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Memory slots	1 SODIMM
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Supported capacity RAM (max.)	1 GB
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LAN	Built-in 10/100/1000 MBit/s
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Audio type	On board
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Audio codec	Realtek ALC262
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Audio features	Output: full 16-bit stereo sound, AC'97 codec
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### Interfaces

DC-in	1
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Audio: line-in / microphone	1
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Audio: line-out / headphone	1
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Front audio: headphone	1
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Front audio: line-in / microphone	1
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USB 2.0 total	8
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USB front	2
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USB rear	4
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USB internal	2
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VGA	1, via Adapter
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DVI	1
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Serial (RS-232)	1 (9 pin)
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**Interfaces**

Mouse / Keyboard (PS/2)	2
Ethernet (RJ-45)	1
Kensington Lock support	1

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**Graphics**

Graphics brand name	AMD® Radeon X1250
Graphic resolution	1920 x 1200 pixel
Graphic color depth	32 bit colors
Shared video memory	64 MB
Refresh rate 1024 x 768 (recommended / max.)	85 Hz / 85 Hz
Refresh rate 1280 x 1024 (recommended / max.)	85 Hz / 85 Hz
Refresh rate 1600 x 1200 (recommended / max.)	85 Hz / 85 Hz
TFT resolution (VGA)	2048 x 1536 pixel
TFT resolution (DVI)	1944 x 1440 pixel 1600 x 1200 pixel 1280 x 1024 pixel 1024 x 768 pixel 800 x 600 pixel 640 x 480 pixel 1920 x 1200 pixel 1680 x 1050 pixel 1440 x 900 pixel
Graphic notes	Dual Monitoring via optional Y-cable possible. (max. 1920 x 1200 pixel) Dual link DVI interface with up to 2048 x 1536 pixel resolution.

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**Network**

Network	TCP/IP with DNS and DHCP Point-to-Point protocol Supported Citrix Load Balancing over ICA DHCP support for automatic firmware upgrades and unit configuration Multiple master browser support on ICA
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**Electrical values**

Power supply input	AC input 100 - 240 V
Power supply input	AC input 100 - 240 V
Rated frequency range	50 - 60 Hz

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**Power consumption**

Power consumption: Maximum (S0, running appl., CD in use)	23 W
Power consumption: Idle (S0, running OS, Idle mode)	14 W
Power consumption: Minimum (ACPI status S5, soft off, WOL enabled)	2,4 W

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**Dimensions / Weight / Environmental**

Dimension (W x D x H)	52 x 191 x 250 mm
Dimension with stand (W x D x H)	97 x 191 x 266 mm
Operating position	Vertical / horizontal (optional, feet needed)
Weight	1.5 kg
Weight notes	Weight may vary depending on actual configuration
Operating ambient temperature	5 - 40°C
Operating relative humidity	10 - 85 % (non condensing)

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**Compliance**

Product	FUTRO S450
Model	TCS-D2703
Europe	CE

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## Compliance

USA/Canada	CSA FCC Class B
Global	RoHS (Restriction of hazardous substances) EPEAT® in progress
Compliance link	<a href="https://sp.ts.fujitsu.com/sites/certificates/default.aspx">https://sp.ts.fujitsu.com/sites/certificates/default.aspx</a>

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## Security

System security	Boot sector virus protection Control of all USB interfaces Write protect option for the Flash EPROM Write protection for the Flash module User and supervisor BIOS password
User security	Optional: Access protection via external SmartCard reader

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## Warranty

Service level	(depending on country)
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### Maintenance and Support Services - the perfect extension

Recommended Service	5x9, Response Time: Next Business Day
Service Weblink	<a href="http://ts.fujitsu.com/Supportservice">http://ts.fujitsu.com/Supportservice</a>

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Information about environmental care, policies, programs and our Environmental Guideline FSC 03230:

<http://ts.fujitsu.com/aboutus>

Take back and Recycling information:

<http://ts.fujitsu.com/recycling>

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