

Company and Product Overview



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IGEL Technology

A world leader in thin client solutions, IGEL Technology helps organizations improve the agility, efficiency, and security of their virtual desktop and application delivery systems. We produce one of the industry's widest range of thin clients, based on Linux and Microsoft Windows, allowing customers to access to a broad spectrum of server-based infrastructures and applications. We also offer our powerful and intuitive management software for easy deployment and administration of thin clients throughout any-size organization. Partnerships with industry leaders like Citrix, Red Hat, VMware, and Microsoft ensure that we provide the most up-to-date technology and trust-worthy security to our clients in industries that include Healthcare, Education & Research, Public Sector, Financial, Insurance, Retail, Logistics, and Manufacturing. IGEL Technology has offices the United States, Germany, Great Britain, Hong Kong, and Singapore, and our award-winning, in-house R&D team is located in Augsburg, Germany.

Dependable, World-class Engineering

All IGEL Technology products are developed and engineered by our award-winning R&D team located in Augsburg, Germany. Wherever we prepare units for our customer – in our American, European, or Asian sales and distribution centers, our just-in-time order processing means our thin clients are updated with the latest firmware and tested immediately before shipping. With this closely monitored in-house process, we are able to guarantee that you get the highest quality technology and first-class service all from IGEL.

Comprehensive Technical Support

After registering your thin clients online, you will receive an extended 3-year warranty as well as free support from qualified, highly trained technicians. Furthermore, our large global network of certified IGEL partners ensures that you have easy, fast access to support wherever you may be in the world.

Free Updates

Firmware updates are free for the IGEL Universal Desktop thin clients and IGEL Universal Management Suite. Updates are even available for discontinued models 3 years after end-of-life.

Greater Security with a Closed System

When it comes to security, IGEL thin clients set the benchmark. IGEL thin clients have no local hard drives, so users are not able to locally install programs and they cannot be infected with viruses. Additionally, the USB ports can be selectively enabled to accept only certain peripheral devices. All IGEL thin clients support smart card readers for secure two-factor authentication, personalization solutions or single sign-on (SSO) as well as selected USB token solutions.

Easy and Convenient to Use: Outstanding Design and Ergonomics

IGEL Universal Desktops not only offer outstanding design and appearance but also exceptional user ergonomics. The state-of-the-art housings are available in black, white or dark blue, allowing them to complement their surroundings and, in particular, fit right in for point-of-sale use. IGEL thin clients have neither cooling fans nor local hard drives. As a result, they produce no noticeable background noise and produce minimal heat.

Firmware Offering Great Flexibility

The firmware that comes standard with IGEL Universal Desktops contains a great variety of integrated software tools, clients and protocols. These features allow users to directly access the greatest variety of centralized IT infrastructures. They include traditional server-based computing (SBC) environments (Microsoft® Windows®, Citrix® and Linux) as well as virtual desktop environments (VMware®, Citrix® or Microsoft®). And the software connectivity does not just stop there. It also covers legacy and SAP host systems. In addition to Java-based or Web-based applications, it also permits direct multimedia streaming or VoIP by means of thin client and headset (softphone).

IGEL Universal Desktops

Our unique Universal Desktop strategy offers the best, most cost-effective connectivity. At the same time, users enjoy the benefits of a flexible range of features made possible by special hardware options along with exceptional user convenience and a high level of security. Compared to conventional thin clients, these features increase the operational economy of these units as well as their service life. Additional major advantages of the IGEL Universal Desktop strategy include efficient management of thin clients as well as their low energy consumption and operating costs.

Benefits of the IGEL Universal Desktops at a glance:

- 1. Low investment costs:** no unnecessary hardware or software (modular design, management solution included at no extra cost)
- 2. Low operating costs:** energy-efficient hardware, an intuitive management solution, no licensing or update costs, long service life (3 years of firmware updates even after model end-of-life)
- 3. Free support and service** for 3 years after product registration
- 4. Flexible deployment:** full connectivity for peripheral devices as well as centralized IT systems and Web/VoIP/multimedia applications
- 5. Future-ready investment:** high processor and graphics performance, large RAM and flash memory, continuously developed firmware including technology and security updates
- 6. Real potentials for consolidation:** PC, terminal, telephone and print server combined into one economical end-user device means less need for middleware
- 7. Outstanding user convenience:** top-notch design and careful assembly, stable firmware, high performance due to direct access to server-based applications, no cooling fans mean no noise, minimal generation of heat



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Many functions. One device.

thin clients

development

services

solutions

Product Specifications

Choosing the Right IGEL Universal Desktop

Every IGEL Universal Desktop is composed of the components hardware, operating system and firmware pack:

Step 1: Three Operating Systems

IGEL Linux is the most cost effective operating system with the best performance. IGEL Linux comes with a broad set of software clients, tools and protocols giving the user the ability to access the required application with the best protocol. Our strong in-house development team, means customers always have the latest updates and features integrated in a rock-solid firmware.

Windows® Embedded® Standard delivers the power of Microsoft® Windows® in a thin client, with 32-bit Windows compatibility for local applications and drivers. With a full-featured local Internet Explorer (Standard and Advanced) and Media Player (Advanced), users have all the required capabilities and maximum flexibility.

Windows® Embedded® CE uses the familiar desktop interface without the high cost of a Windows Embedded Standard operating system. Due to the fact that no local applications or drivers can be added by the user, the system offers high security and stability. The footprint of the Windows CE operating system is the smallest of any Windows embedded operating system.

Step 2: Three Feature Packs

1 Entry – This Feature Pack is designed for customers wanting to access just server-based Windows applications using the Citrix® ICA or Microsoft® RDP protocols. The IGEL Linux and Microsoft Windows Embedded Standard versions also have a Java SE Runtime Environment.

4 Standard – This Feature Pack has all the features of the Entry Pack plus virtualization support, local web browser, PDF Reader and terminal emulation. It also supports remote access using a variety of VPN protocols and the ThinPrint client for enhanced network printing.

7 Advanced – This Feature Pack is an extremely powerful collection of features that can connect you to almost any application, media or peripheral. In addition to the Standard Pack it offers extended multi-media capabilities like multi-media redirection, Citrix HDX, a local Media Player and Flash. Additionally it supports more specialized features such as VoIP, a native SAP GUI, NoMachine NX and ThinLinc printing. For advanced peripheral support, the Advanced Pack also supports USB re-direction so USB devices can connect seamlessly to the server-based Windows desktop.

Step 3: The Hardware Series

UD2 Series – A small, affordable, energy-efficient hardware platform that can be VESA mounted on the back of a monitor. The DVI-I port supports dual monitors with an optional Y-Cable, and it can connect to common peripherals with its 4 USB ports.

UD3 Series – An affordable, compact, versatile mid-range hardware platform. The UD3 series is available with an integrated smart card reader and a connectivity foot that offers wireless network connectivity and/or an additional serial port for legacy peripherals.

UD5 Series – A powerful and expandable hardware platform. Its high-speed processor and graphics can support demanding applications or many applications running simultaneously. It supports the broadest set of connectivity to peripherals. Optionally you can add an integrated smartcard reader and a connectivity foot with a parallel port and wireless network connectivity or an anti-theft USB port.

UD9 Series – An integrated 21.5" (54.6 cm) LCD platform with a broad range of I/O ports. Ideal for customer-facing situations or space-constrained environments. The UD9 offers optional WLAN, touch screen and smartcard reader. Only available with the Advanced Feature Pack.

IGEL Universal Desktop Converter (UDC)

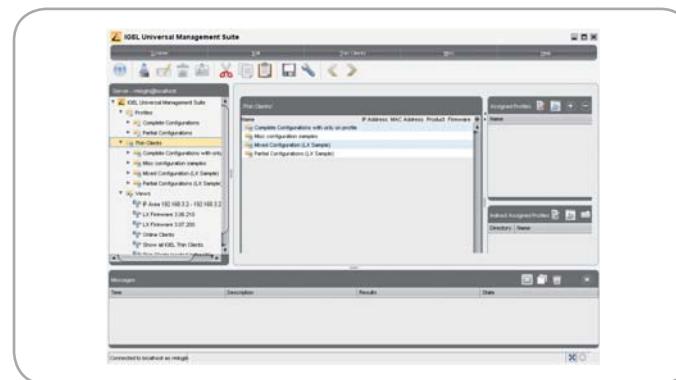


The Universal Desktop Converter (UDC) allows you to migrate your existing PC or old thin client hardware to a fully manageable IGEL Universal Desktop thin client-like device, capable of delivering Citrix, VMware and Terminal Server desktop applications. You can then use the full software functionality of our Entry, Standard or Advanced IGEL thin client firmware packs. Additionally you receive our specialized thin client deployment and management software, allowing you to quickly and securely manage and administer your converted desktop infrastructure. The UDC allows a step-by-step introduction of these technologies and minimizes the initial procurement costs for new client hardware.

IGEL Universal Management Suite (UMS) 3



With IGEL thin client computing, the total cost of ownership (TCO) of the desktop environment can be cut by up to 70%. A substantial portion of this potential for optimizing computing environments is due to powerful features of the IGEL Universal Management Suite, which comes standard with all IGEL units. It offers numerous local protocols, software clients, tools and security features, undergoes continuous development and refinement and sets the standard when it comes to secure and fast management of extensive thin client installations located across several countries/regions. The IGEL Universal Management Suite supports a wide variety of operating systems, databases and directory services, such as Microsoft® Active Directory, making it very easy to integrate into existing installations. Furthermore, the IGEL Universal Management Suite also permits problem-free, compatible management of earlier IGEL models.



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Software



IGEL Universal Desktop Converter (UDC) Software

System requirements

- RAM: 512 MB
- Flash- / HDD-Memory (IDE, USB or SATA): 512 MB
- BIOS: USB boot support / CD boot support

IGEL hardware migration

- IGEL Smart 2110 LX
- IGEL Compact 3210 LX
- IGEL Winestra 4210 LX
- IGEL Premium 5210 LX
- IGEL Premium 5310 LX

Neoware hardware migration

- Neoware c50 (DE-*2-GD)
- Neoware e90 (DC-*2-GD)
- Neoware e140 (DD-*2-GD)

Third party hardware migration

- Acer Veriton N260G
- DELL Optiplex FX160
- Fujitsu Futro S100 / Futro S450 / Futro S500 / Futro S550
- HP t5545 / t5565 / t5735 / t5745
- Samsung TC190 / TC240
- Wyse C90LE / C90LEW

Legacy PC migration

- Standard x86-compatible PC hardware

Available components

- **UDC-Token** (USB)
- **Entry:** UDC-120 LX
- **Standard:** UDC-420 LX
- **Advanced:** UDC-720 LX

Software features

- see Firmware Packages Linux¹

Hardware Series



IGEL Universal Desktops

Hardware		UD2	UD3	UD5	UD9
Power supply		External	External	External	External
Power consumption		13 W (Idle) 2 W (Sleep)	9 W (Idle) 1 W (Sleep)	18 W (Idle) 4 W (Sleep)	38 W (Idle) 2 W (Sleep)
Flash		1 GB (LX) / 2 GB (ES) / 512 MB (CE)	1 GB (LX) / 2 GB (ES)	1 GB (LX) / 2 GB (ES)	2 GB (LX / ES)
RAM		512 MB (LX) / 1 GB (ES) / 512 MB (CE)	512 MB (LX) / 1 GB (ES)	512 MB (LX) / 1 GB (ES)	1 GB (LX / ES)
CPU		VIA Eden	VIA Nano E-Series	VIA C7 (LP)	ATOM n270
Video memory		16–64 MB	64–256 MB	64–128 MB	32–128 MB
Max resolution		1920x1200, Dualview (LX / ES), 1280x1024 (CE)	Dualview, 1920x1200	Dualview, 1920x1200	Dualview, 1920x1080
	1	UD2-121 LX	UD3-130 LX	UD5-120 LX	
	4	UD2-421 LX	UD3-430 LX	UD5-420 LX	
	7	UD2-721 LX	UD3-730 LX	UD5-720 LX	UD9-730 LX UD9-731 LX²
	1	UD2-121 ES	UD3-130 ES	UD5-120 ES	
	4	UD2-421 ES	UD3-430 ES	UD5-420 ES	
	7	UD2-721 ES	UD3-730 ES	UD5-720 ES	UD9-730 ES UD9-731 ES²
	1	UD2-121 CE			
	4	UD2-421 CE			

¹ The functionality available will depend upon the specifications of the original hardware device

² with touchscreen

Operating Systems / Firmware Packages



Firmware Packages:

- 1** = Entry
- 4** = Standard
- 7** = Advanced

IGEL UD5-420 LX

- = IGEL UD5
- + Firmware Package **Standard** **4**
- + **Linux OS**



Operating Systems	Firmware Packages																																						
	Management			Network				Communication													Print Services				Additional Software Features														
	Local and Remote Management (UMS)	Fail-safe Firmware Update	Power Management	Standard: TCP/IP, PXE, Wake-on-LAN, DNS, DHCP	SNMP	PPTP	L2TP	Third Party VPN: Cisco / NCP	PPPoE (DSL via onboard LAN)	RDP / ICA	Microsoft RemoteApp	Microsoft RemoteFX	X-Access (ADMCP)	Citrix XenDesktop	VMware View	Appliance mode for virtual desktops	Ericom PowerTerm WebConnect	Native IBM 5250 Terminal Emulation	Local web browser	Leostream	NoMachine NX	Quest vWorkspace	Virtual Bridges VERDE VDI ³	ThinLinc	Line Printer (LPD)	Internet Printing Protocol (IPP)	Windows Shared Printer	ThinPrint	Multimedia Redirection	Java SE Runtime Environment	PDF Reader	SAP GUI	Extended USB Redirection	.NET Framework	Voice over IP	Media Framework	Flash Player		
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³ By using with SPICE 1GB RAM minimum required

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