

Sun Ray[™] 2FS Virtual Display Client



The Sun Ray virtual display client provides customers with an interoperable desktop computing solution that reduces the maintenance, upgrading, and operational costs associated with most desktop environments. The ultra-secure Sun Ray 2FS virtual display client has unique industry-leading features such as a built-in fiber optic port, native dual-head capabilities and ultra-low power consumption. These clients were designed for secure desktop environments and electronic design automation (EDA).

Highlights Affordable

Manage thousands of

- desktops with just a few system administrators
- Virtually eliminate costs of client virus attacks
- Native Dual-Head Support (Xinerama)

Secure

- Built-in fiber optic port
- Centralize data & applications where they can be:
 - → Easily backed up
 - → Made redundant
 - → Secured against theft & attacks
- Protect intellectual property by eliminating insecure PC storage or removable media

Mobile

 Pick up right where you left off as you Hot Desk from office to conference room to home

Flexible

- Display a Windows, Linux or Solaris OS desktop
- Upgrade applications on thousands of desktops in hours or days, not weeks or months

Sun Ray Overview

Zero-administration Sun Ray virtual display clients enable access to applications on virtually any platform – the Solaris[TM]
Operating System, Java [TM] technology,
Linux, UNIX® Microsoft Windows, AS/400, and mainframes. Sun Ray clients differ from complex PCs and thin clients with embedded operating systems Sun Ray clients have no local operating system (such as Windows XP Embedded or Windows CE) to manage and administer.

Sun Ray architecture consists of two components: the Sun Ray virtual display client and Sun Ray Software

The Sun Ray virtual display client is a simple, low-cost, low-power device that requires no desktop administration. Unlike complex Microsoft Windows or Embedded Linux-based thin clients and PCs, Sun Ray clients do not need to be upgraded when new applications are introduced or more computing power is required. Users can access their sessions from any Sun Ray client on the Local Area Network (LAN) or Wide Area Network (WAN). With a smart card, a user simply inserts it into any available Sun Ray client and instantaneously accesses an existing session.

Sun Ray Software provides user authentication and encryption between server and client, as well as user session management. It not only

enhances security, but also helps reduce the complexity and administration of the IT environment. Sun Ray Server Software provides automatic load balancing, optimizing performance by distributing sessions across the servers in the group. Load balancing takes into account each server's load and capacity (number and speed of its CPUs), so that larger or less heavily loaded servers bear more of the load. Sun Ray Software enables the Sun Ray clients to be connected to a local area network (LAN) or a wide area network (WAN).

Sun Ray 2FS

The Sun Ray 2FS is the only virtual display client from a major vendor that includes fiber to the desktop, native dual-head (similar to Xinerama) and an integrated smart card reader as standard features. This client also boasts the highest resolution in the industry at 1920x1200 at 24-bit color.

Users can connect two monitors to one Sun Ray 2FS client without the need for a PCI extension card. The fiber port enables customers to connect to the network via a fiber optic interface. This eliminates electromagnetic waves and greatly improves the security of the network connection. The Sun Ray 2 FS is also one of the lowest power consuming clients on the market with a meager 7.86 watts of typical power consumption. This less than half most thin clients and less than 10% of a PC.

2 Data Sheet Sun Ray" 2FS sun.com/sunray

The Sun Ray 2FS virtual display client ships without a monitor and is compatible with Sun's monitors as well as standard Video Graphics Array (VGA) or Digital Video Interface (DVI) monitors, enabling organizations to leverage IT investments.

System Specifications

Sun Ray 2FS virtual display client

Hardware

- Graphics: 24-bit graphics; up to 1920x1200 resolution @ 72 Hz
- Peripheral interface: Three USB
 2.0 ports supporting USB 1.1 speeds,
 powered, One serial port
- Networking:
 - → 100Base-FX fiber optic port
 - → 10/100Base-T port
- Input devices: Universal Serial Bus (USB) keyboard; USB mouse; smart card reader
- CPU AMD Alchemy
- Audio: CD-quality audio in/out; microphone; headphone jacks; stereo line level in
- Monitor: Two industry-standard Digital Video Interface (DVI-I) connectors that support 3rd party and Sun[™]monitors, included HD15 adapter; standard VGA compatible monitors; one Sun Ray 2FS supports two monitors that act as a single, integrated display (similar to Xinerama)
- Smart card: ISO-7816-1 (smart card reader)
- Adjustments: N/A

Warranty

3 year limited warranty





Sun Ray 2FS virtual display client

Dimensions

- · Unit without the stand
 - → Width: 28 mm (1.09 in.)
 - → Depth: 215 mm (8.46 in.)
 - → Height: 215 mm (8.46 in.)
 - → Weight: 0.56 kg (1.24 lb.)
- Stand dimensions
 - → Width: 95 mm (3.76 in.)
 - → Depth: 215 mm (8.46 in.)
 - → Height: 13 mm (0.51 in.)
 - → Weight: .63 kg (1.39 lb.)

Regulations

- Safety: UL 60950/CSA C22.2-60950; EN 60950; IEC825, U.S. FDA (laser safety)
- Ergonomics: GS Mark
- EMC: CISPR22; EN55022 Class B; FCC CFR
 Title 47, Part 15, Subpart B, Class B;
 EN55024:1998; IEC6100-3-2; IEC6100-3-3
 (CISPR24:1997)

- Power Management: EPA Energy Star Compliant
- · RoHS-6 Compliant

Environment

- Operating: 0°C to 35° (32°F to 95°F), 10% to 93% RH, 3km (10K ft.)
- Nonoperating: -20°C to 60°C (-4°F to 140°F), 10% to 93% RH, 12km (39K ft.)

Power

- External power supply input: Universal 100-240 VAC autoranging, 50-60 Hz, 0.5A
- System power consumption: 30W AC maximum, 7.86W typical @12VDC

Acoustic

<3.5B, <28dBA (operator), ISO 9296

Sun Microsystems, Inc. 4150 Network Circle, Santa Clara, CA 95054 USA Phone 1-650-960-1300 or 1-800-555-9SUN Web sun.com