Ospirent™

Spirent Landslide E20

Rack-Mountable for Over-the-Air Testing with Real Handsets

Delivering a high-quality subscriber experience has become mission critical for communication service providers as competition intensifies, app ecosystems expand, and devices evolve faster than ever. With customers expecting seamless performance across voice, video, and data services, communication service providers (CSPs) must be able to validate how those services perform from the handset, across the network, to the core, and back. Spirent's Landslide E20 OTA solution makes this possible through over-the-air (OTA) testing using real handsets in a controlled lab setting. This allows operators to accurately assess the performance of services like YouTube, WhatsApp, SpeedTest, Instagram, FaceTime, and voice calling exactly as subscribers experience them in the field.

Many operators rely on siloed or homegrown testing solutions that focus on limited parts of the network, app behavior, or use UI-manipulation scripts. These methods often fall short in fully assessing performance and subscriber experience, leading to gaps in visibility that result in undetected post-release issues or difficulty isolating root causes across the handset, service, and network. As a result, CSPs face increased customer complaints, higher call center volumes, and reputational risk.

The Landslide E20 OTA solution equips operators with a scalable, lab-based platform to validate user experience, device performance, and OS updates before they reach the network. It simplifies testing workflows and reduces operational overhead by eliminating the need to manage UI-dependent scripts that must be reworked with every interface change.

Highlights

- Provides end-to-end OTA test coverage via Spirent Landslide
- Compact, rack-mountable test server
- Equipped with 1 Gigabit Ethernet test ports
- Supports testing of up to 8 real handsets
- Delivers full suite of Landslide OTA test functions
- Ideal for validating 4G/5G mobile and Wi-Fi networks, devices, and services

The E20 supports OTA 4G and 5G testing with Spirent's Landslide application for development, product verification, and pre-deployment scenarios.

- **User and Application Emulation—**Emulate users roaming and handovers throughout mobile and Wi-Fi networks

- **Over-the-Air Testing—**Test Wi-Fi and mobile RF network access for up to 8 real devices per appliance

- **Comprehensive Prerelease Validation—**Extensively test and validate user experience, device performance, and OS updates before they are deployed

Rear view of the E20 rackmount unit
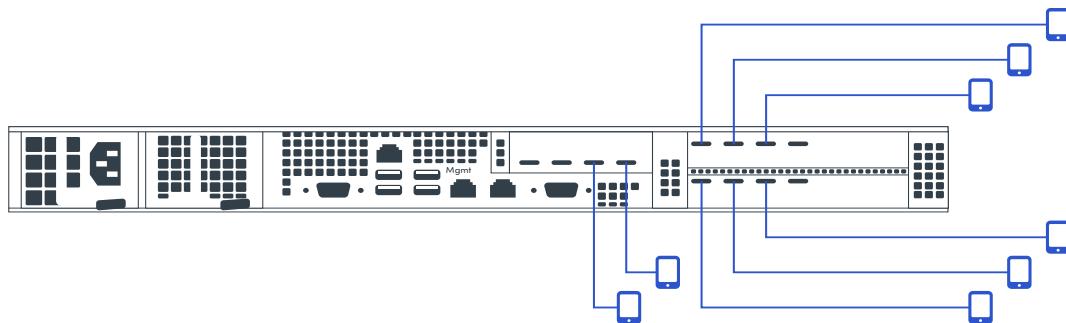
USB connections for up to 8 devices

Key Capabilities

Execute OTA Tests Out of the Box

The Landslide E20 OTA solution comes with a robust out-of-the-box library of Over-the-Air tests designed to validate real-world mobile services using actual handsets. These tests cover critical areas such as voice quality, messaging, video, web access, latency, and network behavior, enabling CSPs to quickly assess application and service performance under realistic conditions. Developed using APIs and SDKs rather than UI-based scripting, these tests are resilient to handset interface changes and reduce the need for ongoing test maintenance.

Build Custom Tests

Custom tests allow operators to validate apps and services that are unique or especially popular on their networks, ensuring a more accurate reflection of real subscriber behavior. With full control over handset actions like taps, swipes, and long presses, users can build and run complex test scenarios directly within Landslide. These tests are fully integrated, schedulable, and support step-by-step debugging for faster issue resolution.

Custom test any app, any gesture

Assess Mobility across 4G, 5G, and Wi-Fi

Operators can recreate complex mobility scenarios in the lab, such as a device transitioning between 4G, 5G, and Wi-Fi networks, or between public and private coverage zones. Landslide E20 controls both the handsets and signal conditions through RF chambers and attenuators, enabling automated, repeatable testing of signal loss, handoffs, and service continuity.

Connected to 5G network → Detects Wi-Fi availability → Offload to Wi-Fi

Test complex handoffs between 4G, 5G, and Wi-Fi networks
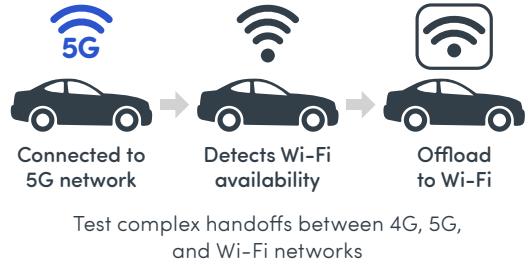
Test Dual Sim Dual Standby (DSDS)

With DSDS testing in Landslide E20, operators can evaluate how handsets manage active and standby connections across two networks. The system recreates switching triggers and traffic flows—such as moving to a Wi-Fi-first Mobile Service Operator (MSO) for data, then falling back to the Mobile Network Operator (MNO) for voice—while monitoring application continuity and power consumption. This allows CSPs to fine-tune SIM selection policies and deliver seamless user experience across dual-network configurations.

MNO   MSO
5G   5G

Assess how handsets connect and perform betwork MSO and MNO networks
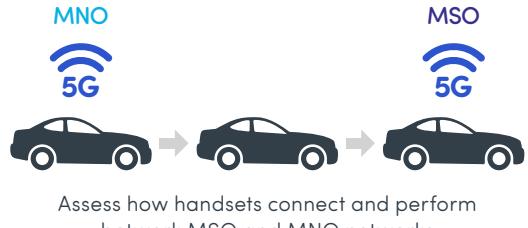
Simulated Roaming Validation

Using Landslide E20, operators can emulate roaming across home and visited networks, including CSFB to 4G, policy-based behavior, and subscriber experience during inter-network transitions. The platform orchestrates SIM behavior, network triggers, and QoE metrics to replicate complex roaming conditions in a repeatable lab setup. This enables CSPs to verify interoperability and minimize roaming-related service disruptions.

MNO1 (Home)   MSO2 (Visited)
5G   5G

Verify seamless roaming across global networks
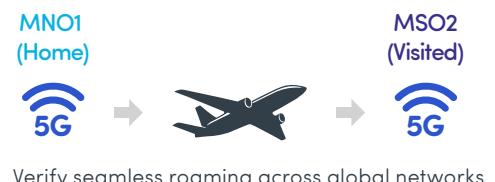
Up to 8 Real Handsets

The new E20 appliance is a 1U rack-mount appliance that supports 4G and 5G OTA testing. Up to 8 real handsets can be tested simultaneously.

Configuration

The Landslide E20 appliance is connected, configured and managed by the C50 or C100 Test Manager. The C100 TAS can manage up to 128 E20s and a C50 TAS can manage up to 32 E20s. In the Test Server configuration, the E20 adopts the licensing from the Test Manager controlling it.

Client PC Requirements

The Landslide client hardware requirements depend on the system licensing and testing activity. The recommended specifications are:

- 64-bit Operating System with 4 GB RAM and 1 GB memory assigned to client
- Minimum 10 GB available disk space
- 100 MB/1 G Ethernet connection to the LAN

Landslide software requirements:

- Test system webpages are best viewed with Internet Explorer 10+ or Firefox 30+
- JavaScript and Java Web Start must be enabled in the browser
- Popup blockers should be disabled before starting
- Cookies should be allowed to save memory settings
- Java™ Runtime Environment 1.8.0 (or later)

Landslide E20 Technical Specifications

Dimensions	
Chassis Size	1U x 17.2" x 25.6"
Weight	35 lbs (Gross)
Rack Mounting	
Mounting Kit	1U Rail Kit included
Rack Compatibility	Fits 25.6" – 33" deep, 4-post racks
Environmental Conditions	
Operating Temperature	10° C to 35° C
Non-Operating Temperature	-30° C to 60° C
Relative Humidity	8% to 80% RH, non-condensing
Power Requirements	
AC Input	100–125VAC / 50–60Hz, 200–240VAC / 50–60Hz
Power Supply Rating	600W
System Hardware	
CPU	E2414 2.8GHz / 4-core
Memory	16GB DDR5
Storage	1 x 1TB SSD
Management Port	
Admin Port	RJ45 GbE LAN / IPMIA Port
Test Ports	
	Host up to 8 USB-C ports 1G port

Ordering Information

Part number	Description	Test Coverage
L-OTA-E20-PLT	Landslide E20 platform for OTA testing	Includes E20 server to enable OTA testing with support for up to 8 tethered devices
L-OTA-BASE	Landslide base software for OTA testing	Base software. Includes UE Node, IP App Node, Dashboard (including remote access, handset permissions), Sequencer
L-OTA-FT-AND	Landslide foundational tests for Android	Foundational tests package for OTA testing covering data, voice and video for Android devices tethered to E20. Per device price
L-OTA-FT-901	Landslide custom scripts for Android	Support for users to create their own custom scripts. Per system price

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