

New SIM Card Server (nSCS) Specifications

Mounting rack

The system is presented as a **standard rack of 19" width and 6U height**.

The rack is featured with a 5Vdc power supply and (optionally) with an Ethernet manageable switch with 16 downstream ports (10/100 Ethernet) and one or two uplink (Gigabyte Ethernet and/or SFP) ports.

The rack contains a backplane and guide rails that can host up to **16 nSCS boards**.

Each slot provides a connector on the board side for the 5Vdc board supply and Ethernet link, connects through the backplane to the rack power supply and exposes a standard RJ45 socket on the back side.

nSCS boards

Each nSCS board is a complete stand-alone SIM Card Server.

It fits into the 6U mounting rack with a 20mm wide front panel and can host up to 32 SIM holders.

There are three assembly versions:

1616 – with **16 removable** SIM holders (push-in push-out) available on the front panel and **16 internal** SIM holders accessible only with the board pulled out from rack;

1600 – with only **16 removable** SIM holders on the front panel;

0032 – with **32 internal** SIM holders.

Any mixed combination may be available in groups of 8 SIM holders and with a maximum of 16 removable (on the front panel).

Power Supply	single 5Vdc (+/-10%) with polarity and overload protection
Current consumption	max.2A
Ethernet interface	10T/100TX, half/full duplex, auto-negotiation, auto-MDIX, pause/jam flow control
Service interface	USB2.0 full-speed
Main processor	ASIX11015@100MHz
Service processor	C8051F321@24MHz

Over the Ethernet interface, the nSCS board provides the full functionality of previous SIM Card Servers:

- SIM control and data transfer (proprietary protocol supported by existing SCESupport.dll)
- SOAP control methods (as defined by SccDiSim.wSDL)

The new firmware version extends functionality with:

- SIM control and data transfer over UDP (new proprietary protocol)
- UPnP discovery and control methods
- HTTP management interface
- Telnet Command Line Interpreter (CLI)

The Service interface is provided for factory tuning and programming and as an alternate access point for maintenance.

nSCS SIM holders

Except for the SIM holder component, all SIM slots on nSCS boards share the same design, firmware and features. Each slot is controlled by a processor (C8051F575@48MHz), interfaces to the SIM Card using a level translator and features a bi-color LED on the front panel.

The SIM Card interface is fully compliant with ISO/IEC 7816 specification.

SIM Card supply	class A,B and C (5V, 3V and 1,8V)
Protocol	T0
Speed	372:1, 512:2 ... 512:32
Features	auto ATR parse and configuration adaptive transfer rate (PPS) transparent command/data exchange