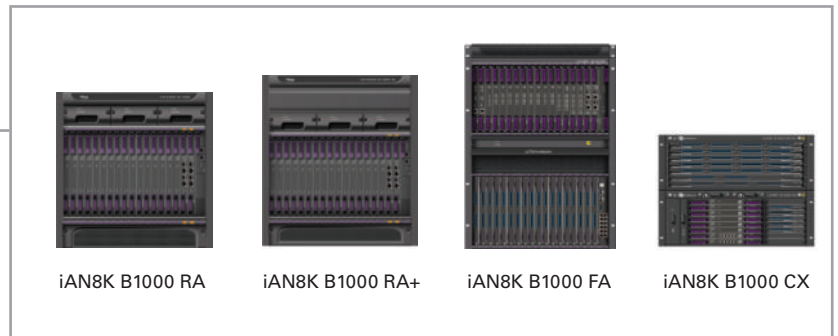


## iAN8K® B1000 IPDSLAM

SCALABLE IPDSLAM ACCESS PLATFORM PROVIDES ALL IP PLATFORM FOR TRIPLE PLAY SERVICES FOR FAST AND ECONOMIC DEPLOYMENTS.



iAN8K B1000 RA

iAN8K B1000 RA+

iAN8K B1000 FA

iAN8K B1000 CX

- UPTO 3072 ADSL2+ PORTS PER RACK
- HIGH AVAILABILITY PLATFORM
- HOT STANDBY
- DUAL REDUNDANT POWER
- ADSL/ADSL2/ADSL2+/VDSL2
- ANNEX A/ANNEX M /ANNEX L AND ANNEX B
- H.248/SIP
- DUAL HOMING FOR VOIP SERVICE
- RELIABLE GE/FE NETWORK INTERFACE FOR IP APPLICATIONS

### PRODUCT DESCRIPTION

UTStarcom's modular iAN8K B1000 IPDSLAM is a versatile carrier class DSL access product that can be tailored to the customer's needs for Broadband remote access and subscriber aggregation. This product offers high capacity traffic aggregation and robust, "always on" service.

The iAN8K B1000 IPDSLAM is an all IP product capable of interfacing directly with the evolving IP network in a cost-effective manner. The Ethernet WAN interface on the iAN8K B1000 IPDSLAM directly connects to an Internet router or LAN switch, thereby eliminating the traditional bandwidth bottleneck typical in an ATM network. In addition, the iAN8K B1000 enables service providers to gradually populate the platform based on subscriber demand, eliminating costly platform upgrades and providing maximum network deployment flexibility.

All Ethernet and IP architecture provides simplified subscriber and service management, resulting in lower CAPEX and OPEX. Advanced Management, QoS and Security features enable a rich mix of revenue generating services possible without compromising on customer experience for any one service.

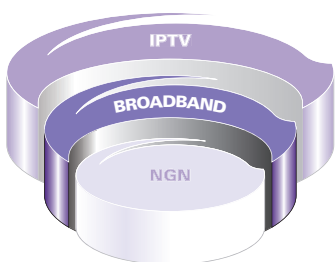
The iAN8K B1000 IPDSLAM is managed by Netman®4000, which provides comprehensive management and operation support based on SNMP. The Netman solution supports batch configuration mechanisms, which can significantly simplify the provisioning task and minimize provisioning errors.

### APPLICATIONS

It supports revenue generating services like IPTV, VoIP and Differentiated Broadband Data services. It supports full range of ADSL, VDSL and SHDSL access technologies. Availability of multiple chassis sizes enables both CO and Remote deployments. It provides the flexibility to provide traditional DSL based services like High Speed Internet access and also the advanced services like IPTV, Gaming etc.

#### Broadband Access and Subscriber Aggregation

The iAN8K B1000 IPDSLAM enables broadband ADSL applications such as e-mail, Internet access, corporate VPN, file transfer, multimedia distribution, voice-over-IP telephony and more.



### **Triple Play Services**

Used in conjunction with UTStarcom's end-to-end network and customer premise equipment, the iAN8K B1000 IPDSLAM enables the deployment of "Triple Play Services". Triple Play refers to the comprehensive combination of broadcast quality TV and entertainment services, with broadband access and IP voice. In addition to Triple Play services, the iAN8K B1000 IPDSLAM paves the way for a broad complement of future, value added services such as video phone, video conferencing, electronic commerce over TV (t-commerce), video mail, personalized content programs and more. By combining the iAN8K B1000 IPDSLAM with UTStarcom's Rolling Stream platform, Service Providers may also offer subscribers network-based, virtual VCR and Video On Demand (VOD) services.

### **Enterprise Services**

For large enterprise network, iAN8K B1000 IPDSLAM can serve as a high performance, cost-effective TLS, providing a simple way to connect satellite facility using the existing copper line. When compared to the lease line or dialup solution, this approach is more economical and provides higher bandwidth.

### **VoIP Services**

The iFXS is a VoIP module which includes VoIP signaling & media processing, FXS ports, FE interfaces. The iFXS module has one fast Ethernet interface to backplane as uplink and connects to the IP network via the ICM3/3G/3Gc module.

## FEATURES

### Subscriber Interface Module

IPADSL6A, IPADSL6B, IPADSL8A, IPSHDSL3, IPVDSL4, iFXS1

### IP/ATM Network Interface Module

ICM3, ICM3G, ICM3Gc (IP Concentration Module), ASM (ATM Service Module)

### Shelf Configuration

1 to 4-shelf system, 16 Universal line module slots, 2 special slots for IP aggregation module, 2 half-slots for PCU modules

### xDSL Standards

G.991.2, G.992.1, G.992.3, G.992.5, Annex A, Annex B, Annex L, Annex M, G.993.2, G.994.1.

### xDSL Features

Auto Fallback on ADSL2+ and VDSL2 Modules, Power Cutback, 8 PVC per DSL port, PVC Rate limiting, SETL/DELT, F4/F5 Loop back, L0/L2 Power Saving Modes, OLR-BS/SRA, PSD Control, INP Configuration

### Call Signalling And Media Protocols

H.248, SIP, RTP/RTCP

### Media Processing Capabilities

G.711, G.729 AB, G.723.1, G.726, T.38. RFC2833, G.168 Echo cancellation, Voice Activity Detection (VAD) and Comfort Noise Generation (CNG), Support Bellcore, ETSI, China, NTT, UK CID standard. Tone Detection and Generation, G711 Appendix I & II, Packet Loss Concealment & Recovery (RFC2198, RFC2733).

### Layer 2 Features

4K/8K/16K MAC Addresses, Wire-speed switching engine, Rapid Spanning tree (IEEE 802.1 W), VLAN (IEEE 802.1Q), IGMP snooping (v1/v2/v3), MAC layer Class of Service (802.1 p), IP TOS based Class of Service, Port mirroring,

### VLAN Features

4K VLANs, IEEE 802.1p/q compliant, Port/Classification based VLANs, Q in Q, Multicast VLAN

### Security Features

Anti IP and MAC spoofing, IP and MAC limiting, Anti DoS attack features, Per VLAN and Global User Isolation

### QoS Features

Multiple Queues and Priority levels per port, SP and WRR Scheduling, Packet Classification, Traffic Metering, Traffic Shaping and Marking,

### NMS

GUI based network management platform, SNMP, XML based Northbound interface

Command Line Interface

### Reliability and High Availability

Full redundant Controller and Power Modules

## INTEROPERABILITY

### VoIP

Interoperates with mSwitch®

### IP

Interoperates with all industry standard layer 2/3 switch equipment as per IEEE / IETF specifications

### xDSL

Interoperates with standard compliant CPEs. Field tested and deployed with customers all over the globe.

# Technical Specifications



## CHASSIS OPTIONS

iAN8K B1000 RA	19 Slot shelf	2 ICM + 1 PCU + up to 16 Line Cards	Max 768 Subscribers per shelf
iAN8K B1000 RA+	19 Slot shelf	2 ICM + 1 PCU + up to 16 Line Cards	Max 768 Subscribers per shelf
iAN8K B1000 FA	19 Slot shelf	2 ICM + 1 PCU + up to 16 Line Cards	Max 768 Subscribers per shelf
iAN8K B1000 CX	8 Slot Shelf	2 ICM + 1 PCU + up to 5 Line Cards	Max 240 Subscribers per shelf

## SYSTEM MANAGEMENT & ETHERNET AGGREGATION CARDS

ICM3	Control Card for ADSL/ADSL2/2+/SHDSL/VoIP	2 GE electric and optional optical uplink
ICM3G	Control Card for ADSL/ADSL2/2+/SHDSL/VoIP	5 GE optional + 2 electric uplink
ICM3Gc	Control Card for ADSL/ADSL2/2+/SHDSL/VDSL2/VoIP	5 GE optional + 2 electric uplink

## SUBSCRIBER SIDE LINE CARDS

IPADSL6A	48 port	ADSL2+, Annex A, Annex M, Annex L
IPADSL6B	48 port	ADSL2+, Annex B
IPADSL8A	48 port	ADSL2+, Annex A, Annex M, Annex L
IPSHDSL3	24 port	IP based G.SHDSL Line card
iFXS1	24 port	VoIP based on SIP and H.248
IPVDSL4	24 port	4 Band VDSL2 Line Card

## ATM SERVICE AGGREGATION CARDS

ASM, 75ohm	8 T1/E1 IMA	1 FE uplink
ASM, 120ohm	8 T1/E1 IMA	1 FE uplink
ASM, OC3	2 STM-1/OC3	2 FE or 1 GE uplink

## PHYSICAL (PURE STANDALONE CHASSIS DIMENSIONS)

### iAN8K B1000RA SHELF (H X W X D)

- 444 mm x 482 mm x 442 mm

### iAN8K B1000RA+ SHELF (H X W X D)

- 533 mm x 482 mm x 498 mm

### iAN8K B1000 FA SHELF (H X W X D)

- 710 mm x 482 mm x 334 mm

### iAN8K B1000 CX SHELF (H X W X D)

- 222 mm x 482 mm x 325 mm

### RACKS/CABINETS

- Open CO racks, indoor as well as outdoor cabinets as per customer applications

### MOUNTING

- 19" inch Rack mount (Standard)

## ENVIRONMENTAL

### OPERATIONAL TEMPERATURE

- 0°C - 45°C (non-harden, system ambient) or -5°C to +50°C (harden, system ambient)

### RELATIVE HUMIDITY

- 5% - 90% (non-condensing)

### STORAGE TEMPERATURE

- -40°C ~ 70°C

### ACOUSTICAL NOISE

- Less than 75 dBA

## REGULATORY COMPLIANCES

- CE
- ITU-T K.20
- FCC Part 15 Class A
- EN60950/UL 60

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### UTStarcom, Inc. USA

1275 Harbor Bay Parkway  
Alameda, CA 94502 USA  
Tel: 510-864-8800  
Fax: 510-864-8802

[www.utstar.com](http://www.utstar.com)

### About UTStarcom, Inc.

UTStarcom is a global leader in IP-based, end-to-end networking solutions and international service and support. The company sells its broadband, wireless, and handset solutions to operators in both emerging and established telecommunications markets around the world. UTStarcom enables its customers to rapidly deploy revenue-generating access services using their existing infrastructure, while providing a migration path to cost-efficient, end-to-end IP networks. Founded in 1991 and headquartered in Alameda, California, the company has research and design operations in the United States, China, Korea and India. UTStarcom is a FORTUNE 1000 company. For more information about UTStarcom, visit the company's Web site at [www.utstar.com](http://www.utstar.com)

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