

**SurfinBird IX78 Broadband Access Router with Firewall and ADSL Modem**

Features	Note	SurfinBird IX78 ADSL	SurfinBird IX78 ADSL GW2	SurfinBird IX78 ADSL AIR	SurfinBird IX78 ADSL AIR GW2
<b>ADSL</b>					
ADSL full rate (G992.1/T1.413) and extended reach		X	X	X	X
ADSL 2+ (G992.3, G992.5)		X	X	X	X
Annex M (extended upstream speed)		X	X	X	X
Annex A / Annex B / Annex C*		X	X	X	X
<b>Access Router</b>					
NAT/PAT		X	X	X	X
DHCP Server / Client		X	X	X	X
Local DNS Server		X	X	X	X
Dynamic DNS Client		X	X	X	X
LAN Support - Separate Ethernet Subnets		X	X	X	X
Additional Public IP Addresses on LAN		X	X	X	X
DMZ		X	X	X	X
Ethernet Ports		4	4	4	4
USB Host Port		1	1	1	1
PPPoE, PPPoA		X	X	X	X
RIP1, RIP2		X	X	X	X
Multiple ADSL WAN PVCs with QoS Routing		Up to 8	Up to 8	Up to 8	Up to 8
RTSP Proxy (e.g. for Video-on-Demand)		X	X	X	X
Multicast Support with IGMP Proxy and Unicast Conversion (for IPTV)		X	X	X	X
Multiple Ethernet WAN VLANs 802.1p/q with QoS Routing*		Up to 8	Up to 8	Up to 8	Up to 8
Throughput (WAN LAN through firewall)		Up to 90 Mbps	Up to 90 Mbps	Up to 90 Mbps	Up to 90 Mbps
<b>Firewall</b>					
Router-based		X	X	X	X
Packet Filtering		X	X	X	X
Stateful Inspection		X	X	X	X
Proxy Firewall		X	X	X	X
Game and Application Support		X	X	X	X
Selectable Firewall Security Levels	IX	X	X	X	X
Port and IP Redirections		X	X	X	X
Manual Firewall Rule Edit	IX	X	X	X	X
VPN Pass Through (multiple clients): SSH, PPTP, IPSec ESP Tunnelling Mode, IPSec NAT-T (IPSec over UDP)		X	X	X	X
<b>VPN Server &amp; Client (upgrade package)</b>					
Protocol:	IPSec		U	U	U
Crypto:	DES, 3DES, AES Hardware accelerated Diffie-Hellman: group 1, 2 and 5		U	U	U
Identification:	X.509 Certificate, Pre-shared key		U	U	U
Authentication:	RSA, DSS		U	U	U
RSA Key Length:	2048, 1024, 512		U	U	U
Authentication Methods:	HMAC with MD5, HMAC with SHA-1		U	U	U
Max. Number of Simultaneous Live Connections			20	20	20
VPN Server & Client Configuration: EasyServer - Create a Complete VPN Server with One Click EasyClient - Connect to Common VPN Servers Easily	IX		U	U	U
Creation of Client Certificates	IX		U	U	U
<b>Wireless</b>					
IEEE 54Mb/s 802.11b/g Access Point				X	X
MAC Address Filtering				X	X
WEP encryption 64 and 128 bits				X	X
WPA / WPA2 Encryption, 802.11i				X	X
WiFi Protected Setup*				X	X
Antenna:				1 Fixed,1 Internal	1 Fixed,1 Internal
<b>Status and Logging</b>					
Network Status	IX	X	X	X	X
Logging: System Log, Firewall Log, SIP Log, VPN Log		X	X	X	X
Export to External Syslog Server		X	X	X	X

**X = Standard feature**  
**IX = Intertex specific feature, not found in mainstream routers**  
**U = Upgradeable Feature**  
**\* = On request**

Subject to change without notice.

For more information please see [www.intertexdata.com](http://www.intertexdata.com)

CONTINUED

Features	Note	SurfinBird IX78 ADSL	SurfinBird IX78 ADSL GW2	SurfinBird IX78 ADSL AIR	SurfinBird IX78 ADSL AIR GW2
<b>Quality of Service (QoS) for VoIP</b>					
Tag Traffic for Prioritization of SIP Media Streams in Subsequent Network Equipment (DiffServ and TOS)	IX	X	X	X	X
Prioritization of SIP Media Streams (Automatic)		X	X	X	X
Call Admission Control for SIP	IX	X	X	X	X
Reduces data traffic upstream to allow SIP voice and video		X	X	X	X
<b>SIP Support (IP Telephony (VoIP), Video, Presence, Instant Messaging and more)</b>					
True SIP Transparent Firewall (between LAN and the Internet) (NAT and Firewall controlled by SIP Proxy and registrar)	IX	X	X	X	X
Common SPAM/SPIT Control (blacklist, whitelist, authentication)	IX	X	X	X	X
Simultaneous global SIP calls (Extended by session licenses)	IX	3-U	3-U	3-U	3-U
<b>SIP Server Upgrade (Own SIP domain with advanced routing)</b>					
Register SIP phones and soft clients	IX	U	U	U	U
Routing of SIP calls globally, outgoing and incoming	IX	U	U	U	U
Dialling Plan (Trap Number, Route to PSTN Gateway)	IX	U	U	U	U
ENUM lookup	IX	U	U	U	U
Dial 0 or 9 for Outside PSTN Line (like a PBX, Optional)		U	U	U	U
Mix SIP URL, PSTN Number and Extension Numbers	IX	U	U	U	U
Use Service Provider's Ordinary SIP Account as Gateway to the Telephone Network (PSTN) for All Users	IX	U	U	U	U
<b>Seat User License Functions (Upgrade to add PBX-like functionality per user. Included with FXS ports.)</b>					
Internal Extension Numbers	IX	U	U	U	U
Incoming Call Processing (forward in sequence or parallel)	IX	U	U	U	U
Match Incoming Calls from PSTN Gateway to Users	IX	U	U	U	U
Route to external voice mail server	IX	U	U	U	U
Individual SPAM/SPIT Control (blacklist, whitelist, authentication)	IX	U	U	U	U
<b>Other Upgrades, C+S+F+SIP Server Included in SIP Switch Upgrade (also available as separate upgrades)</b>					
C: Crypto pack: TLS, SRTP pass through	IX	U	U	U	U
S: LAN SIParator*	IX	U	U	U	U
F: FENT (Far-End NAT Traversal)	IX	U	U	U	U
Ingate SIP Trunking (connect IP-PBX on the LAN to outside)	IX	U	U	U	U
<b>SIP Telephone Network Gateway (FXO port)</b>					
FXO Port accessible from LAN and WAN with authorization	IX		X		X
For Emergency Calling and Other Locals Calls	IX		X		X
Integrate Incoming Calls on Existing Number with SIP VoIP	IX		X		X
Back up if VoIP Provider's Service Unavailable	IX		X		X
Forward incoming calls and collect extension numbers	IX		X		X
<b>FXS Port for Analogue Telephone (Becomes SIP Client)</b>					
FXS Port accessible from LAN and WAN	IX		2		2
Can register at Internal or Service Providers SIP Server	IX		X		X
Dial Using DTMF or GUI (e.g. for URL calling)			X		X
Caller ID methods: V.23, Bell 202, DTMF			X		X
T.38 (Fax over IP)			X		X
FAX pass through	IX		X		X
Fallback to telephone line at power loss			X		X
Telephony Functions (Caller-id, Call Waiting, Call Hold, 3-way Calling, Attended and Blind Transfer)			X		X
<b>Other Features</b>					
Email Notification	IX	X	X	X	X
Web Based Configuration		X	X	X	X
Telnet CLI Configuration		X	X	X	X
TR-069		X	X	X	X
SNMP v2		X	X	X	X
Upgradeable Firmware		X	X	X	X
Keys and Display	IX	X	X	X	X
Operating System Support		Independent	Independent	Independent	Independent
<b>Ordering info</b>					
Ordering Number		IX78-e4dh ADSL	IX78-e4dhos2 ADSL	IX78-e4dhw ADSL	IX78-e4dhwos2 ADSL

**X = Standard feature, U = Upgradeable Feature**  
**IX = Intertex specific feature, not found in mainstream routers**  
**\* = Feature planned for free upgrade (Timing TBD)**

Subject to change without notice.

For more information please see [www.intertexdata.com](http://www.intertexdata.com)

Supported Protocols: IPSec, IKE, GRE, L2TP, PPTP, PPPoE, IP, ICMP, TCP, UDP, IGMP, FTP, RTSP, SIP, CHAP, PAP, SNTP, POP3, DNS

FXS and FXO port features: G.711, G.729, G.729A Voice Codecs, G.168 Echo Cancelling, Silence suppression and comfort noise generation, In or Out of Band DTMF, Digest Authentication

Certification:  
Dimensions:  
Weight:  
Mounting:  
Power Supply:

CE, FCC  
165 x 154 x 35 mm, (excl. stand and antenna)  
0.3 kg (excl. power supply)  
Vertical (with stand), wall mount  
12 V DC, 1A