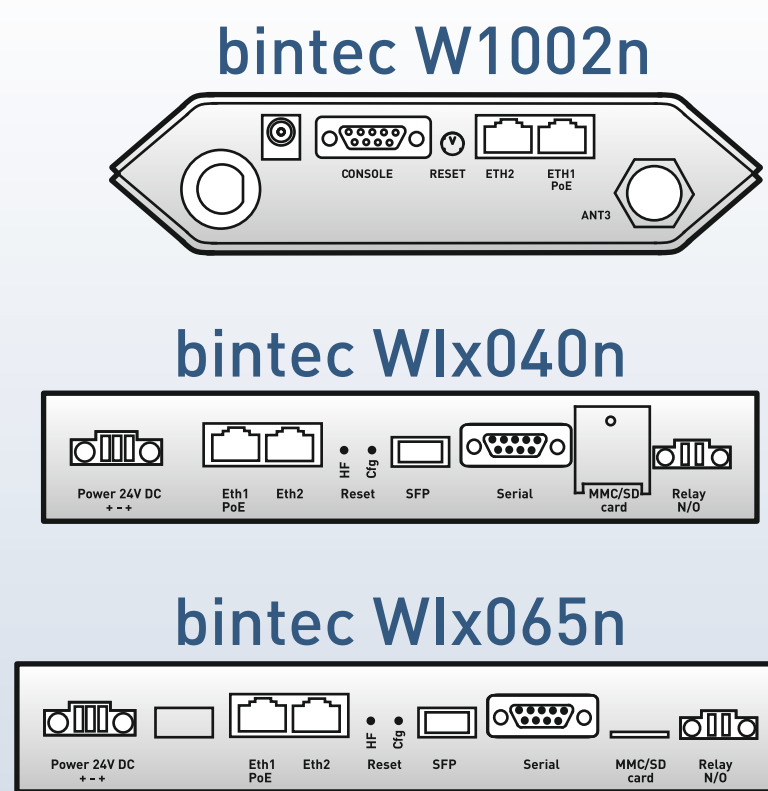
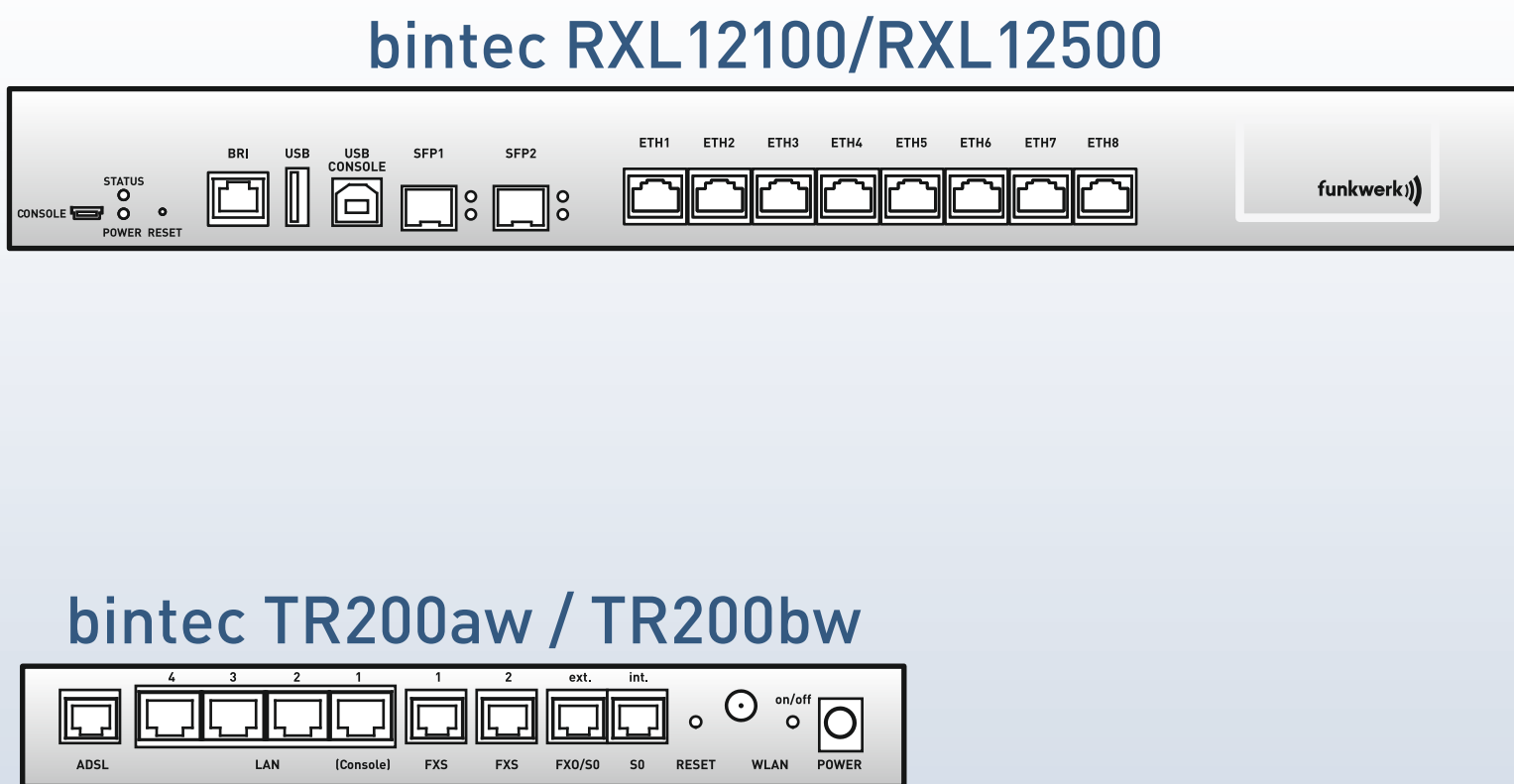
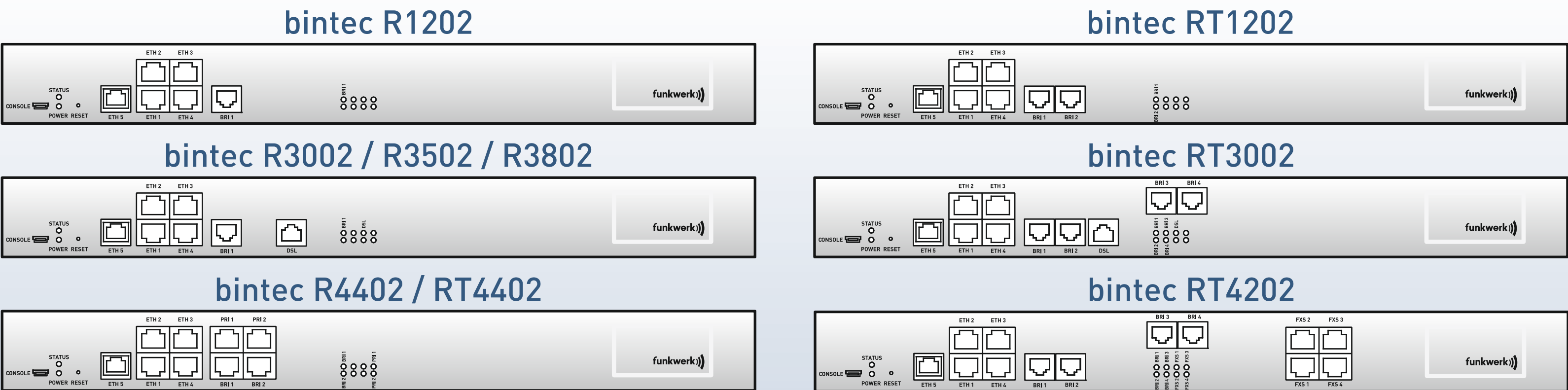
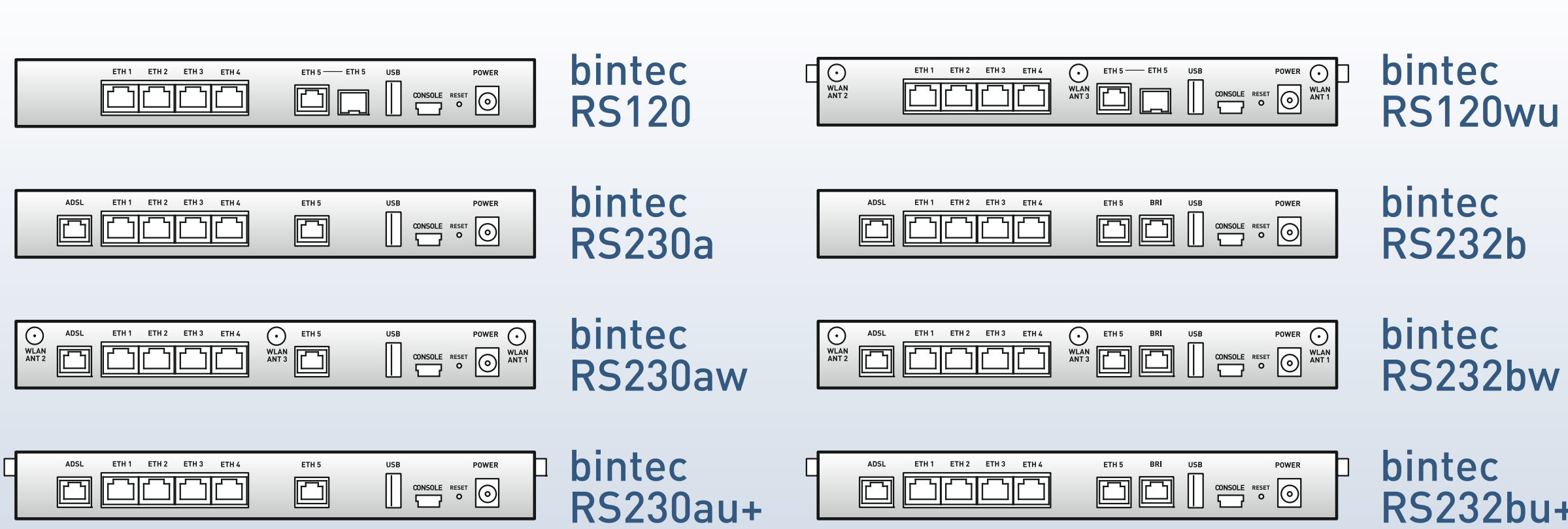


bintec Gateways and Access Points



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Gateways

	bintec RS120	bintec RS120wu	bintec RS230a/aw	bintec RS230au+	bintec RS232b/bw	bintec RS232bu+	bintec R1202	bintec R3002	bintec R3502	bintec R3802	bintec R4402	bintec RT1202	bintec RT3002	bintec RT4202	bintec RT4402	bintec RXL12100	bintec RXL12500	bintec TR200aw/bw
Ethernet Ports	5x 1000BASE-T	5x 1000BASE-T	5x 1000BASE-T	5x 1000BASE-T	5x 1000BASE-T	5x 1000BASE-T	5x 1000BASE-T	5x 1000BASE-T	5x 1000BASE-T	5x 1000BASE-T	5x 1000BASE-T	5x 1000BASE-T	5x 1000BASE-T	5x 1000BASE-T	5x 1000BASE-T	8x 1000BASE-T	8x 1000BASE-T	4x 100BASE-T
SF slot für optical Ethernet module	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	2	2	–
Internal xDSL modem	–	–	ADSL 2+	ADSL 2+	ADSL 2+	ADSL 2+	–	ADSL 2+	VDSL	SHDSL	–	–	ADSL 2+	–	–	–	–	ADSL 2+
DSL variants	–	–	Annex A	Annex A	Annex B	Annex B	–	Annex A+B	Bandpl.998	8-Draht, IMA	–	–	Annex A+B	–	–	–	–	Annex A/B
WLAN	–	a/b/g/n	a/b/g/n [2]	–	a/b/g/n [2]	–	–	–	–	–	–	–	–	–	–	–	–	b/g
ISDN ports	–	–	–	–	1x S ₀	1x S ₀	1x S ₀	1x S ₀	1x S ₀	1x S ₀	2S ₀ +2S _{2M}	2x S ₀	4x S ₀	4x S ₀	2S ₀ +2S _{2M}	1x S ₀	1x S ₀	2x S ₀
Analogue ports	–	–	–	–	–	–	–	–	–	–	–	–	–	4x FXS	–	–	–	FXO+2 FXS
VoIP / Fax DSP (max. channels)	–	–	–	–	–	–	–	–	–	–	–	4	8	12	64	–	–	4
UMTS (3G+) HSPA modem	–	HSPA+	–	HSPA+	–	HSPA+	–	–	–	–	–	–	–	–	–	–	–	–
USB port	1	1	1	1	1	1	–	–	–	–	–	–	–	–	–	1	1	–
Serial interface (console) / USB (console)	1/–	1/–	1/–	1/–	1/–	1/–	1/–	1/–	1/–	1/–	1/–	1/–	1/–	1/–	1/–	1/1	1/1	1/–
Energy-efficient switched-mode power supply	external	external	external	external	external	external	internal	internal	internal	internal	internal	internal	internal	internal	internal	internal	internal	external
19" metal housing	–	–	–	–	–	–	•	•	•	•	•	•	•	•	•	•	•	–
Software features																		
Internet protocol version 6 (IPv6)	• [3]	• [3]	• [3]	• [3]	• [3]	• [3]	• [3]	• [3]	• [3]	• [3]	• [3]	• [5]	• [5]	• [5]	• [5]	• [4]	• [4]	–
IPSec tunnels (included / maximum)	5 / 5	5 / 5	5 / 5	5 / 5	5 / 5	5 / 5	10 / 110	10 / 110	10 / 110	10 / 110	10 / 110	10 / 110	10 / 110	10 / 110	10 / 110	25 / 200	100 / 2500	5 / 5
IPSec hardware acceleration / encryption	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	–	optional	–
VoIP gateway (analogue / ISDN / SIP)	–	–	–	–	–	–	–	–	–	–	–	4	8	8+4	optional 30	–	–	•
Fax over IP (T.38) (number of channels)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
CAPI Server virtualisation / Fax G3 (T.30)	– / –	– / –	– / –	– / –	• / –	• / –	• / –	• / –	• / –	• / –	• / –	• / 4	• / 8	• / 8	• / opt. 30	– / –	– / –	– / –
Max. number of PPTP/L2TP/GRE tunnels	5	5	5	5	5	5	110	110	110	110	110	110	110	110	110	25 (opt. 200)	100 (opt. 1000)	optional
Content filtering / HotSpot	opt./opt.	opt./opt.	opt./opt.	opt./opt.	opt./opt.	opt./opt.	opt./opt.	opt./opt.	opt./opt.	opt./opt.	opt./opt.	opt./opt.	opt./opt.	opt./opt.	opt./opt.	– / –	– / –	opt./opt.
WLAN Controller / max. number of APs	–	–	–	–	–	–	opt. / 72	opt. / 72	opt. / 72	opt. / 72	opt. / 72	–	–	–	–	opt. / 150	opt. / 150	–
Device redundancy (BRRP)	optional	optional	optional	optional	optional	optional	•	•	•	•	•	•	•	•	•	•	•	–
Backup (ISDN/analogue ^[1] /GSM ^[1] /UMTS ^[1])																		
Article number	5510000219	5510000220	R230a: 5510000221 R230aw: 5510000223	5510000292	R232b: 5510000224 R232bw: 5510000225	5510000293	5510000210	5510000211	5510000212	5510000213	5510000214	5510000228	5510000229	5510000231	5510000232	5510000310	5510000235	TR200aw: 5010600000 TR200bw: 5010600001

[1] External modem and cable required, not included in delivery (except for RS120wu / RS230au+ / RS232bu+)

[2] only aw resp. bw variant

[3] Customer Preview Release available, final Release scheduled for Q4/2011

[4] Scheduled for early 2012

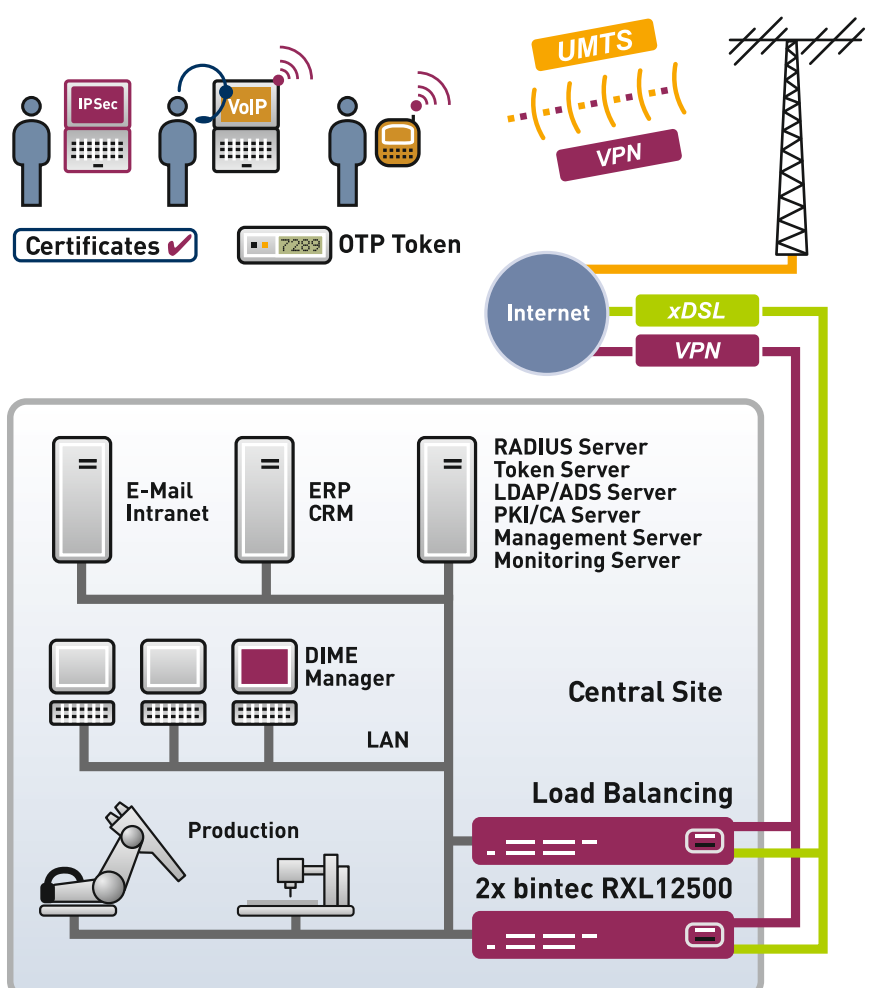
[5] Scheduled for late 2012

Access Points

	bintec W1002n	bintec W11040n	bintec W12040n	bintec W11065n	bintec W12065n
Number of internal radio modules	1	1	2	1	2
IEEE 802.11a/b/g/n	a/b/g/n	a/b/g/n	a/b/g/n	a/b/g/n	a/b/g/n
Frequency range 2.4 / 5 / 5.8 GHz	• / • / •	• / • / •	• / • / •	• / • / •	• / • / •
Operation mode WLAN off/AP/Bridge/Client	• / • / • / •	• / • / • / •	• / • / • / •	• / • / • / •	• / • / • / •
Multi-SSID (up to 8 SSIDs per radio)	•	•	•	•	•
Security					
WPA/WPA2 Personal / Enterprise Mode	• / •	• / •	• / •	• / •	• / •
VLAN (up to 32)	•	•	•	•	•
VPN IPSec with hardware acceleration	•	•	•	•	•
Software / Management					
Roaming (AP mode) with IAPP	•	•	•	•	•
Fast Roaming for 802.1x Encryption	•	•	•	•	•
Internet dial-up (PPPoE)	•	•	•	•	•
Configuration via HTTP	•	•	•	•	•
Config. via HTTPS, SSH, Telnet, SNMP	•	•	•	•	•
DIME Manager support	•	•	•	•	•
WLAN Controller	optional	optional	optional	optional	optional
Hardware					
Ethernet ports	2x 100BASE-T	2x 100BASE-T	2x 100BASE-T	2x 100BASE-T	2x 100BASE-T
Energy-efficient switched-mode power supply	external	optional	optional	optional	optional
Power Over Ethernet acc. to IEEE 802.3af	•	•	•	•	•
Compliant to R&TTE directive 1999/5/EG	•	•	•	•	•
Medical approval acc. to EN 60601-1-2	•	•	•	–	–
Automotive approval E1 mark	–	•	•	–	–
Protection class / usage	Indoor	IP 40	IP 40	IP 65	IP 65
Article number	5510000165	5010590006	5010590007	5010590013	5010590014

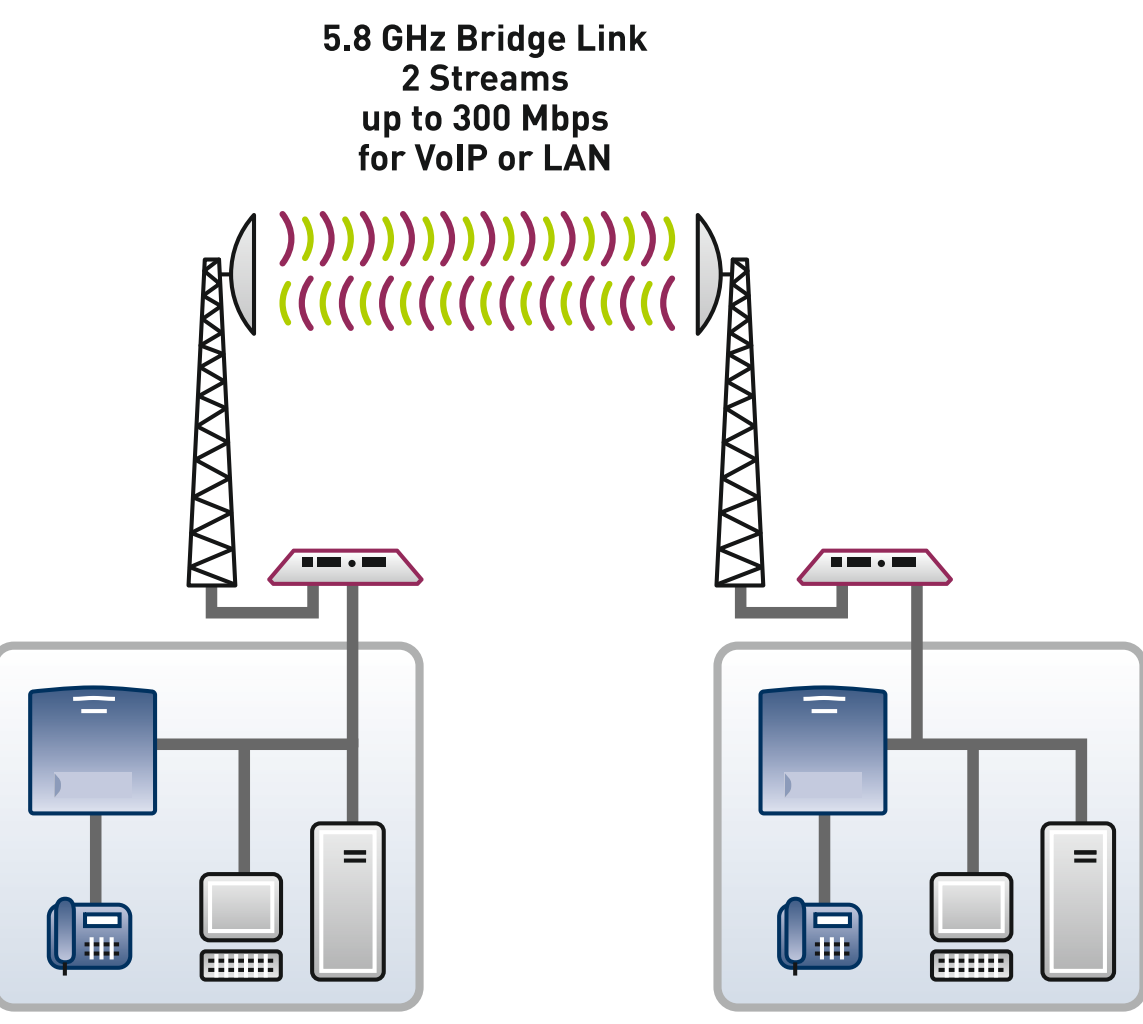
Connecting of mobile employees (VPN Client to Site)

- Support for X.509 multi-level certificates
- Enhanced security using IKE Extended Authentication together with one-time password solutions
- Excellent IPSec performance due to integrated hardware encryption accelerator
- Simple administration supporting IKE Config Mode and IPSec multi-user connections
- High availability due to central-side device redundancy
- Scalable solutions using clustering and load balancing



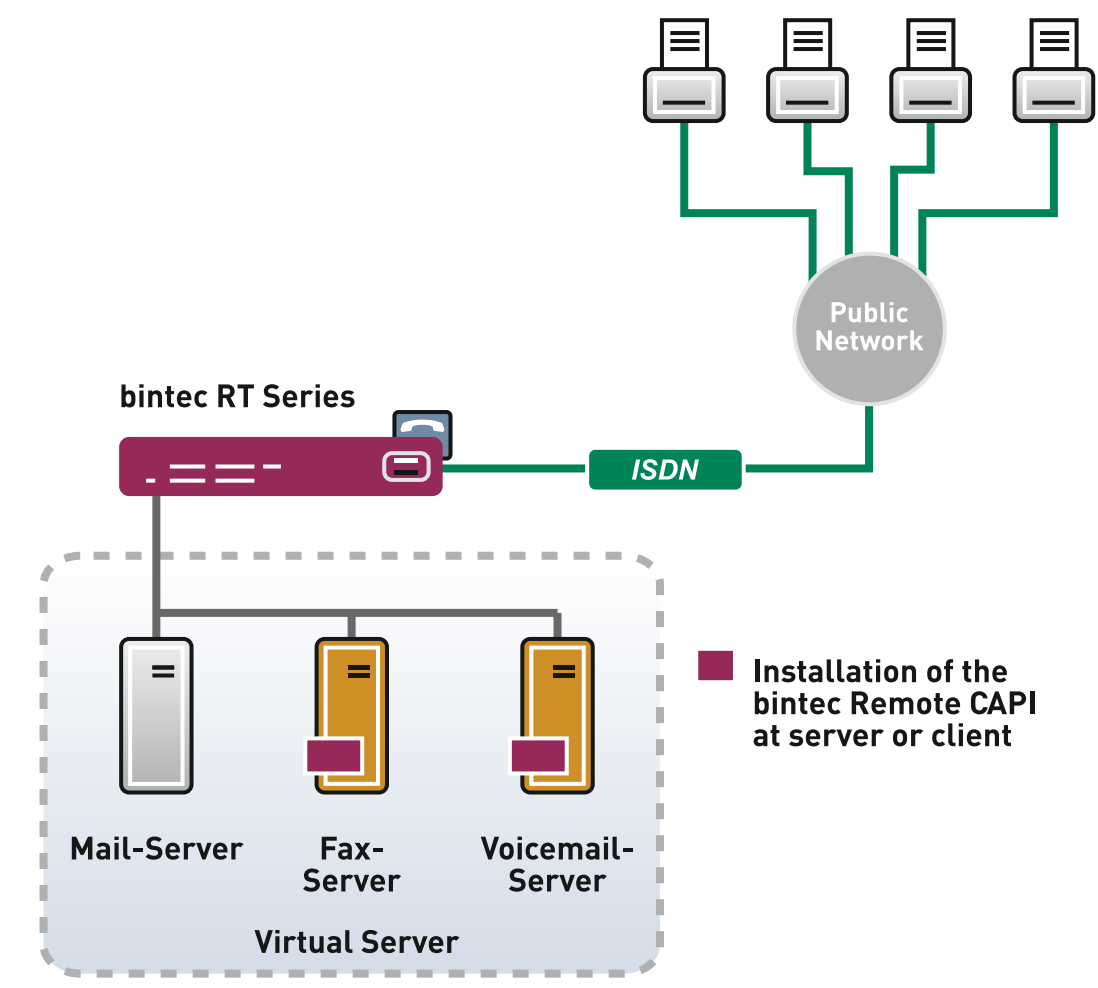
High-Performance WLAN Bridge

- LAN-to-LAN coupling with up to 75 Mbps net throughput rate
- Operation permissible with up to 4000 mW transmission power in 5 GHz band
- IEEE 802.11n over two streams in combination with dual polarisation antennas: 100% advantage in performance
- Less cable needed when mounting the access point (e.g. W1065n) directly at the pole (minimises cable losses)



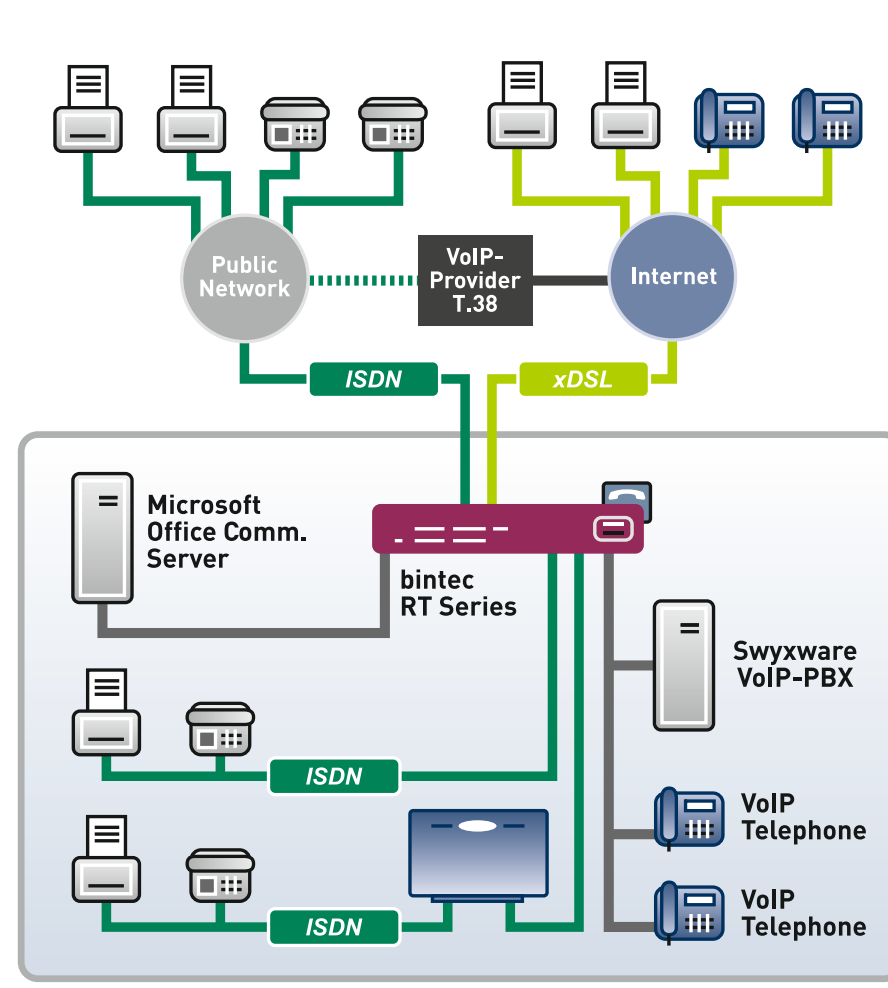
Remote CAPI for server virtualisation

- Access to ISDN ports in the gateway over IP for applications compliant to CAPI 2.0
- Dedicated DSP hardware resources for each channel
- Simultaneous conversion of telephone calls and fax transmissions
- Installation, maintenance and reconfiguration of CAPI applications possible without system reboot
- Remote CAPI client available for UNIX/Linux or Windows XP / Vista / 7 (32 and 64-bit), can be applied for embedded systems



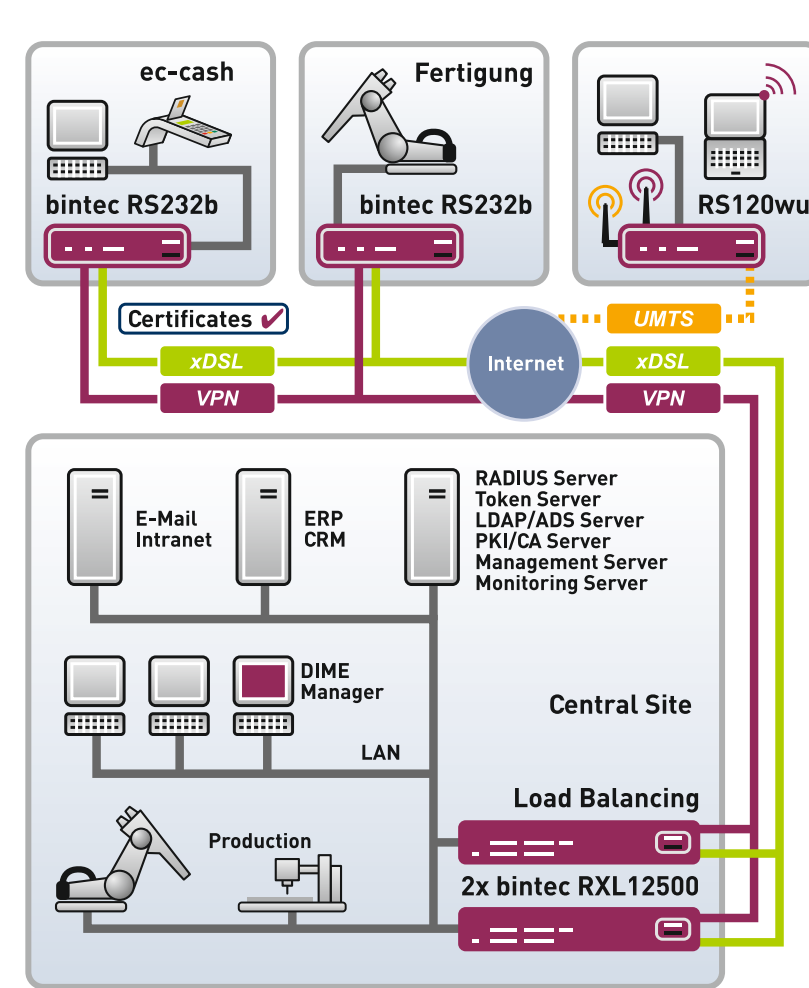
Versatile VoIP Media Gateway

- Smooth migration of TDM-based telephone and fax installations towards VoIP/FoP with SIP and T.38
- Simultaneous conversion of telephone calls and fax transmissions
- Direct registration of terminals at a SIP provider or VoIP PBX, SIP phones can be connected to an ISDN PBX
- Integration of the analogue G3 fax protocol (T.30) as well as Fax over IP (T.38)
- Flexible application of codecs G.711, G.726 or G.729a for ISDN voice quality in parallel to high compression rates
- Certified by Addix, Swyx, Starface and others



Secure VPN connection for subsidiaries, branch and home offices

- Enhanced security for data communication using X.509 certificates
- Excellent IPSec performance due to integrated hardware encryption accelerator
- Integrated HotSpot functionality (optional)
- Simple and centralized management with DIME Manager
- Resiliency and high availability using device redundancy at the central site and various backup mechanisms at the branches
- Scalable solutions with clustering and load balancing
- Support for latest broadband access technologies



bintec WLAN Controller Solution

- Configuration of a WLAN network in 30 minutes without particular WLAN skills
- Wizard-guided installation in just five steps
- Integrated HotSpot functionality (optional)
- Applicable for installations with up to 150 access points
- No dedicated hardware for up to 6 APs: license runs on a master access point.
- For 7 - 150 access points a bintec router as controller hardware (e.g. bintec R1202) is required
- Seamless roaming for voice over WLAN telephony; voice ready

