



DATA SHEET

Access to a new world of feature rich, connected anywhere telephony, at low cost and low risk

Com.X1 is both a flexible and feature-rich Hybrid-PBX and IP-Gateway solution in a single IU box.

Com.X1 provides a scalable and powerful telephony solution for small to medium installations.



Features

- Powerful VoIP and legacy TDM telephony convergence
- 50+ Users: IP Phone or Analogue phone support (no additional licenses require)
- 32 simultaneous calls
- SIP trunking: 12 simultaneous G.729 CODEC's
- Base system supports 1 x PRI, up to 4 x BRI, up to 16 x FXS / FXO ports and 50+ VoIP extensions
- Seamless expansion by means of additional rack mount Comma iTA units and an Ethernet interconnect
- IP phone support: SNOM, Yealink, Polycom, Siemens Gigaset and many others
- IU rack-mount or desk mount unit
- Sophisticated PBX feature set: Voice Mail, Voice Mail-to-email, Call Recording, Auto-Attendant / IVR, Call Queuing, Conference, Music on Hold, Roaming Extensions, Operator Panel, Call Detail Records and many others
- Powerful IP-Gateway features: "FlexPath" call-routing, "behind PBX working" supports satellite offices
- Voice Recording: 300,000 minutes on device, unlimited backup to external devices
- Web-based GUI management - user friendly, install and configuration "wizard"
- Telephone Management System (TMS) support for: MAN3000, TNG, Unison, A2Billing and others
- VoIP QoS and bandwidth optimization: "ViBE" integration from Voipex (UK)
- ICASA type approval
- Neotel IP-PBX certification

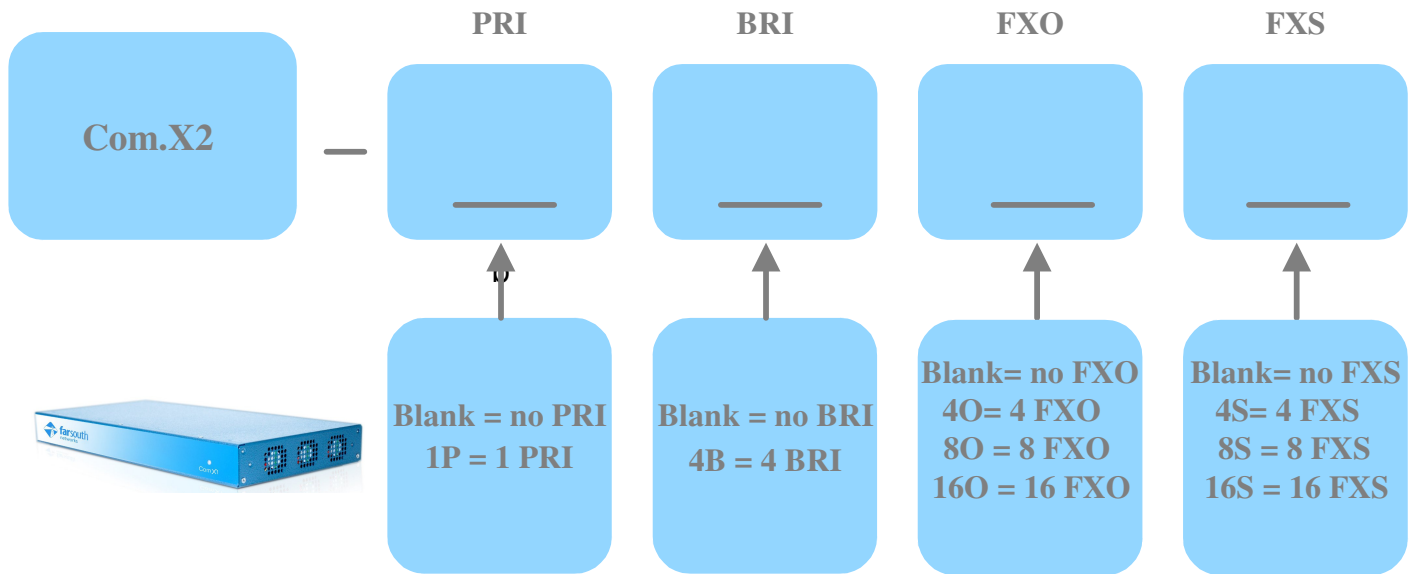


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Ordering Information

Part Number Generator

The Com.XI is modular, with the ordering code made up as follows. Not all combinations are possible.



Note: Total FXS plus FXO ports may not exceed 16 ports per Com.XI unit.

Part number examples:

Com.XI-4O12S	Hybrid-PBX with wired telephony support for 4 FXO & 12 FXS
Com.XI-4B32S	Hybrid-PBX with wired telephony support for 4 x BRI & 32FXS
Com.XI(G)-8O8S	IP-Gateway feature set only, with telephony support for 8 FXO & 8 FXS
Com.XI(G)-4B	IP-Gateway feature set only, with telephony support for 4 BRI ports (TE or NT mode)



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Technical Specifications

Host Processing Platform

CPU	Via C7 1.5 GHz
Memory	512 MHz DDR2 standard
Storage	32GB SATA SSD / 8 GB Compact Flash (optional)
I/O Ports	3 x 10/100 Base-T LAN, 2 x USB 2.0, 1 x RS-232, WiFi (optional)
Operating System	Ubuntu Linux 8.04 LTS

Telephony Interfaces (per unit)

	Primary Rate	Basic Rate	Analog (FXS)	Analog (FXO)
Voice Ports	30 (E1), 24 (T1)	8	4, 8, 16	4, 8, 16
	Note: Telephony port expansion supported via connection of Comma iTA units			
Physical	RJ-45	4 x RJ-45	RJ-11	RJ-11
Electrical	E1/G.703 120Ω T1/G.703 100Ω	S/T TE or S/T NT (software selection)	Zone dependent, software programmable DC and AC characteristics. Balanced sinusoidal ringing (3 REN)	Zone dependent, software programmable impedance matching.
Protection	Power cross Inter-building	-	Power cross Inter-building	Power cross Inter-building
Conformance	TBR 4	TBR 3		Country-dependent

Voice Features

Echo Cancellation	Hardware based G.165 type adaptive echo cancellation per channel Up to 64 channels at 16 ms or 32 ms Up to 32 channels at 64 ms			
Hardware Codecs	-	-	G.711 A-law or μ -law	G.711 A-law or μ -law
Software Codecs	G.711, G.726, iLBC, SPEEX, GSM G.729A (optional with license purchase)			
Fax and Modem	Packet-network synchronization and G.711 provide transparent fax/modem support			

Signalling

Signaling System	ISDN PRI - ETSI ISDN PRI - NI-2 E1-CAS T1-CAS	ISDN BRI - ETSI ISDN BRI - NI-2	Loop-start DTMF	Loop-start DTMF
Other Features	Configurable network clock synchronization	Configurable network clock synchronization	Caller ID transmission Hook flash Distinctive ring	Caller ID reception

Packet Interfaces

VoIP	SIP + RTP IAX2 + RTP
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Administration

Management	Web based GUI, including platform backup and restore
Logging	Log (with configurable levels)
Field upgrade	Application and firmware remote update from hosted repository
Call Detail Records	MySQL database for CDR

Physical Characteristics

Power	12VDC, 5A via external AC/DC adapter (supplied)
Environmental	0°C - 40°C
Dimensions	427mm x 200mm x 43mm
Mounting	Desktop, 1U rack mount (mounting kit supplied)

Certification

Safety	IEC 60950-1:2001 & SANS 60950-1:2003
EMC	CISPR 22 Class B
Other	TBR 3, TBR 4, ICASA TE-001 (S. Africa)



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PBX Feature Set

For a full description of all Com.XI features refer to Com.XI Administrators Guide, available at: <http://archive.farsouthnet.com/doc/com.X-administrator-guide.pdf>

The list of features provided below is common across all Com.XI platforms:

Basic Features	
<ul style="list-style-type: none"> Remote Management: <ul style="list-style-type: none"> Monitoring Backup and restore 	<ul style="list-style-type: none"> Outbound route configuration (least cost routing and fail-over support) Inbound route configuration (Conferences, Day/Night, Ring Groups, Voice mail, IVR, Phonebook)
<ul style="list-style-type: none"> Analogue and IP phone configuration 	<ul style="list-style-type: none"> Announcements
<ul style="list-style-type: none"> IP-phone support: SNOM, Yealink, Polycom, Gigaset and more... 	<ul style="list-style-type: none"> Conferences
<ul style="list-style-type: none"> Follow me and divert 	<ul style="list-style-type: none"> Feature codes
<ul style="list-style-type: none"> Unlimited voice mail & voice mail to email 	<ul style="list-style-type: none"> Music on Hold
<ul style="list-style-type: none"> Call Recording, 300,000 minutes (on-demand or all calls) 	<ul style="list-style-type: none"> Call Data Records and TMS support (MAN3000, TNG, A2Billing, Unison and others)
<ul style="list-style-type: none"> SIP trunks (with dynamic trunk fail-over) 	<ul style="list-style-type: none"> Operator Panel
<ul style="list-style-type: none"> Trunk health detection 	

Advanced Features	
<ul style="list-style-type: none"> Hot-desking 	<ul style="list-style-type: none"> Interactive Voice Response (IVR)
<ul style="list-style-type: none"> Remote extensions 	<ul style="list-style-type: none"> Parking lots
<ul style="list-style-type: none"> IP Phone auto-configuration 	<ul style="list-style-type: none"> Pin sets
<ul style="list-style-type: none"> “Flexpath” routing: <ul style="list-style-type: none"> Class of Service Partitioning / Multi-tenant Trunk to trunk Gateway 	<ul style="list-style-type: none"> Queues Ring groups Voice mail blasting Listening in on calls - “spy” feature
<ul style="list-style-type: none"> Legacy PBX remote extension gateway 	<ul style="list-style-type: none"> Phone book
<ul style="list-style-type: none"> Immediate dialling 	<ul style="list-style-type: none"> Paging and Intercom
<ul style="list-style-type: none"> Call back 	<ul style="list-style-type: none"> Advanced Operator Panel
<ul style="list-style-type: none"> Budget Router (“premicell” contract support) 	<ul style="list-style-type: none"> Fax Server