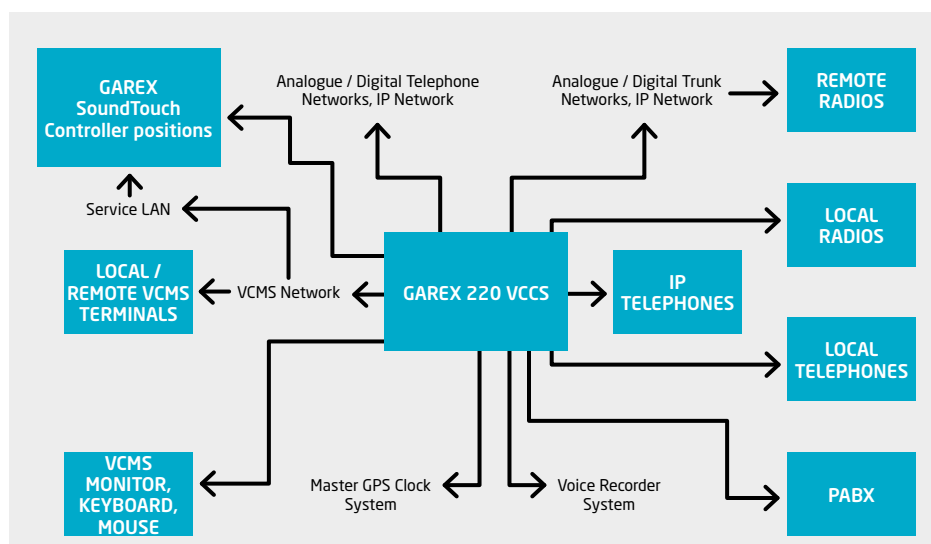


GAREX 220

Compact / Midi / Avance VCCS



The GAREX 220 family of VCCS systems offers a full range of ATC communications functionality, developed over the 50 years that GAREX has been recognised worldwide as a provider of functional, safe and dependable communications solutions.

GAREX 220 COMPACT

The GAREX 220 Compact provides a comprehensive but cost-effective, standardised package of communications facilities. The system provides enough flexibility to enable it to be installed in the vast majority of ATC environments and offers few customised facilities. The feature range of the Compact is continually reviewed and adjusted to keep pace with changing ATC needs.

GAREX 220 MIDI

The mid-range GAREX 220 Midi delivers the same set of features and functions as the Compact, but is delivered with two nodes of central equipment that in addition to providing a greater capacity of positions and connected lines, can be divided into two separate sub-systems. For security against fires and other threats the nodes can be installed in separate equipment rooms or even in separate buildings. Controller Positions and digital radio connections have duplicated connections to both nodes, whilst analogue radio lines and all telephone lines are distributed evenly between the two nodes.

GAREX 220 AVANCE

The GAREX 220 Avance is the largest member of the family. It can be supplied in sizes up to 200 ATC controller positions and more than 500 analogue and digital connections to radios and telephone lines, and can be fully customised to meet special needs and requirements.

All members of the GAREX 220 family can be integrated into a networked solution that supports hundreds of Controller Working Positions (CWPs) and many hundreds of radios that function as a single virtual system in which any CWP can access any radio anywhere in the network.

GAREX 220 VCCS Family Comparison Chart

GAREX 220 MODEL	COMPACT	MIDI	AVANCE
SYSTEM MAXIMUM QUANTITIES			
Controller position	36	72	100+
Radio interfaces 4 wire E&M	46	92	100+
E1 for radio leased line interface	12	24	70+
VoIP radio interface	-	-	○
E1 for VCCS to VCCS tie line connectivity	12	24	70+
E1 for digital recording output	24	48	70+
Analogue telephone interfaces - total	52	104	Configuration dependent
2 wire	○	○	○
4 wire	○	○	○
MFC-R2	○	○	○
MFC-C5	○	○	○
Others	-	-	○
Analogue telephone interfaces - total	22	44	Configuration dependent
ATS-QSIG	○	○	○
BRI	○	○	○
PRI/QSIG	○	○	○
VoIP telephone interface	-	-	○
Others	-	-	○
VCMS			
Server workstation	1	1	1
Additional client workstation option	○	○	○
Networking client functionality	○	○	○
GAREX administration package	○	○	○
SNMP agent option	-	-	○
FUNCTIONS AND FEATURES			
A + B Configuration	-	○	○
Standard radio and telephone functions	○	○	○
Extended radio and telephone functions	○	○	○
Customised radio and telephone functions	-	-	○
Short term recording/Instant Replay	○	○	○
Radio voting	○	○	○
Failsafe PTT	○	○	○
Customer defined options	-	-	○
UPGRADE TO OTHER GAREX 220 MODELS	YES	YES	N/A

KEY

○ = Various combinations of these components may be selected up to the specified total amount

- = Not available



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Indra reserves the right to modify these specifications without prior notice.

GAREX 220 COMPACT

Compact VCCS



User-friendly access to advanced ATC communication features has been the hallmark of the GAREX VCCS for 50 years. When it comes to rapid, safe and reliable communications for tower and smaller ACC applications, the newly refined GAREX 220 Compact VCCS offers no-frills, few options – and no doubts.

TIME TO SWITCH?

The GAREX 220 VCCS family is the result of our experience in the design, development, manufacturing and turnkey deliveries of Voice Communication Control Systems to ATC centres, networks and airports.

The GAREX 220 Compact VCCS offers all the functionality and connectivity required for ATC communications at installations with up to 36 Controller Working Positions.

1. Controller Working Positions are equipped with one Touch Screen Panel, one loudspeaker and a single two-plug panel for connecting two positions instruments such as microphones, headsets or handsets. The Controller Working Positions are delivered in 6U high 19" frames for mounting in consoles, desktops or racks.
2. Pre-defined function list which covers basic ATC communications requirements.
3. The GAREX 220 Compact pre-defined configurations supports up to:
 - 36 GAREX SoundTouch™ Controller Working Positions
 - 46 analog radio connections
 - 52 analog telephone lines and trunks
 - 6 x ISDN/QSIG for connection to PSTN/PABX
 - 12 x E1 for radio leased line interface
 - 12 x E1 for VCCS to VCCS tie line connectivity
 - 24 x E1 for digital recording output
 - 2 x ISDN BRI
 - 4 x ATS-QSIG trunks, each with three voice channels.

GAREX 220 COMPACT

Compact VCCS

More than 500 GAREX VCCS have been installed in 50 countries on all continents of the world. Countrywide coverage (main ATC centres) is provided in countries such as The Netherlands, Belgium, Denmark, the Czech Republic and the UK. GAREX reliability and capacity means that busy airports like Schiphol (Amsterdam), Santiago (Chile), Sofia (Bulgaria), Orly (Paris), Changi (Singapore), Kastrup (Copenhagen), Beijing (China) and Oslo (Gardermoen) are ensured of trouble-free ATC communications.

The GAREX 220 Compact VCCS meets the Eurocontrol Safety Regulatory Requirements:

- ESARR 4 Risk Assessment and Mitigation
- ESARR 6 - Software in ATM systems

INTERESTED?

We would be glad to give you a budgetary quote if you fill in the "specification" below and send it by e-mail to sales@indra.no

GAREX 220 COMPACT VCCS

Power Supply 110 - 230 VAC ☐ 48 VDC ☐ 24 VDC ☐

ITEMS

QUANTITY

SoundTouch™ Controller Working Position

Analog Radio Channels (4W E+M)

4-Wire Analog Telephone Lines

2-Wire Analog Telephone Lines

ATS-QSIG lines (3B+D)

ISDN PRI Lines (30B+D)

E1 QSIG Lines (30B+D)

Headset with PTT, stereo

Handset w/PTT

Hand Microphone with PTT

Footswitch for PTT

Attendance at Factory Acceptance Test

On-site integration and test support

TRAINING OPTIONS

User Training, conducted on site,
10 participants, 1 day

Maintenance Training, conducted at factory,
5 participants, 5 days

CONTACT INFORMATION



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