



## Corporate Presentation



- ▶ Leading designer and supplier of telecommunications equipment and provider of electronic manufacturing services (EMS)
  - Telecommunications: PBX Systems, Rural Exchanges
  - Security Products : CCTV, Intruder, Apartment & Villa Entry, Access Control
  - Turnkey Projects within Telecom and Defense Industries
  - EMS: Household Appliances, Defense and Security Systems
  
- ▶ Company Facts
  - Founded in 1986; publicly listed in Istanbul Stock Exchange (ISE)
  - Continuous growth with 2010 revenues %30 up from 2009
  - Profitable since 1990; maintaining strong cash position
  - Over 1,000 employees
  - HQ in Istanbul, Turkey; R&D and Manufacturing centers in Ankara, Turkey



### ► Karel in Numbers

- One of the biggest 17 PBX manufacturers, globally
- More than 9 million consumers worldwide
- 3<sup>rd</sup> largest PBX / IP PBX manufacturer in Europe
- 2<sup>nd</sup> biggest PBX / IP PBX brand in MEA Region
- Number 1 brand in TDM seat license shipments in MEA Region



▶ Telecom Products

- PBX Solutions
- Public Switching Solutions
- Military Communications Solutions
- New offerings introduced in 2011:
  - Security and Surveillance Systems
  - Unified Communications Solutions
  - Communications Enabled Business Applications

▶ Turnkey Telecom Projects

- HDSL / Fiberoptics / Radiolink Transmission Solutions for major operators
- IVR Projects, Smart and Credit Card Payphone projects for major operators

▶ Electronic Manufacturing Services (EMS)

- Electronic control modules for household appliances
- Board level military-standard compliant electronics cards



- ▶ Direct sales and sales via authorized dealers in:

- ☐ **Turkey\***
- ☐ Azerbaijan

- ▶ Sales in over 25 countries via local/regional distributors in:

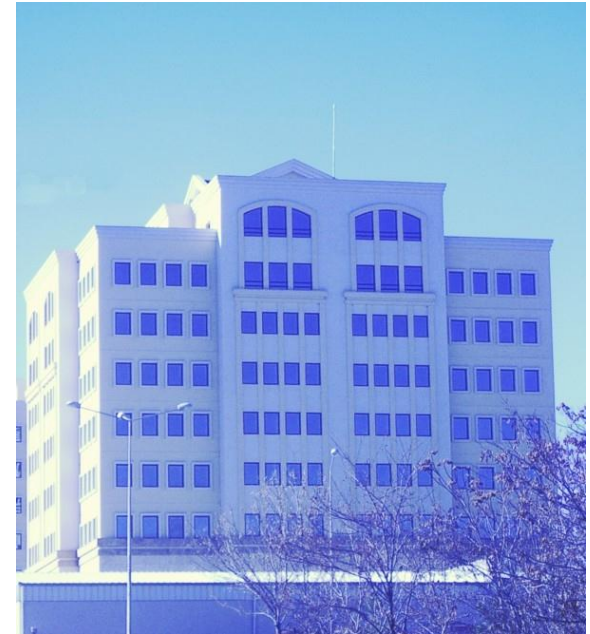
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- (\*) In Turkey:
- 5 Regional offices
  - 325 Authorized dealers
  - 500 Sales and After-Sales Service Points



- ▶ CMMI level 3 approved development processes
- ▶ Located at Cyberpark, a prestigious academy-industry collaboration center within the Bilkent University campus outside of Ankara, Turkey
- ▶ Benefiting from significant state-sponsored research incentives in place through 2013
- ▶ 11 matrix-managed research and development engineering teams specialized in IT and ECT
- ▶ Mechanical and industrial design departments
- ▶ Test and integration departments
- ▶ Up-to-date software and hardware infrastructure





- ▶ State-of-the art 20,000 m<sup>2</sup> facility
- ▶ RoHS compliant design and manufacturing
- ▶ Planning and control by Oracle ERP
- ▶ CAD/CAM/CAT
- ▶ Through-hole insertion, surface-mount technology
- ▶ Electromechanical mounting
- ▶ Semi-automatic manual mounting
- ▶ Wave soldering
- ▶ ICCT testing
- ▶ Automatic placement of 210,000 components per hour



MS Series



SOHO Systems  
2-4 lines  
6-12 extensions

Medium Sized Systems  
4-28 lines  
12-124 extensions

IPV Series



SOHO Systems  
2-20 IP subs  
2-16 TDM ports

Medium Size IP-PBX  
50-100 IP subs  
56 TDM ports

DS Series



Large Sized Systems  
8-96 lines  
16-16000 extensions



Rural Switches  
Class4/5 Features  
Up to 32,000 ports

PBX Solutions

Public Exchanges

Feature/Digital/IP Phones



Soft Phones



DECT Phones



DECT Base Stations



GSM FMC Gateways



PBX Phones

Wireless Products

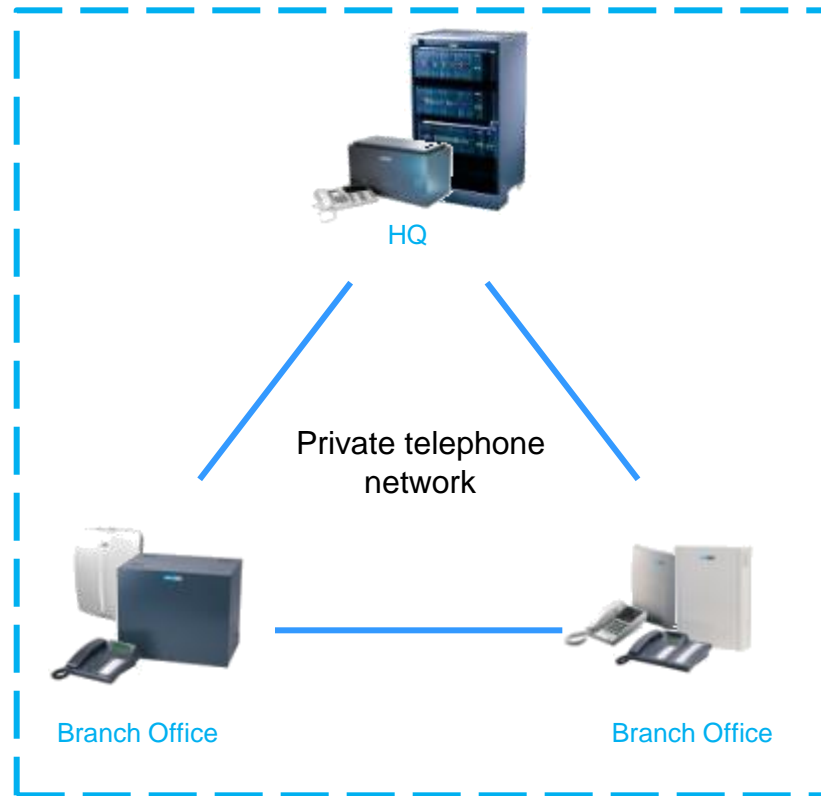




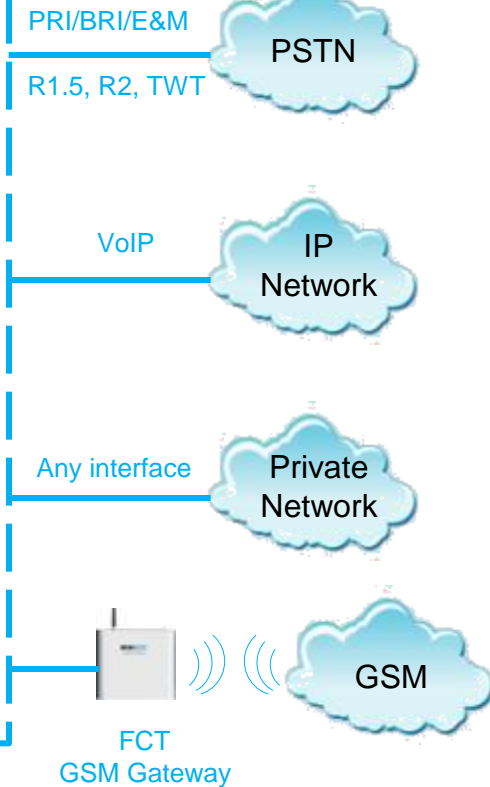
## TELEPHONY



## TELECOMMUNICATIONS WITHIN ORGANIZATIONS



## CONNECTION TO OTHER NETWORKS



### MS SERIES



SOHO Systems  
2-4 trunk lines  
6-8 extensions



Medium Sized Systems  
4-28 trunk lines  
12-124 extensions

### IPV SERIES



SOHO Systems  
2-20 IP ports  
2-16 TDM ports

Medium Size IP-PBX  
20-100 IP ports  
56 TDM ports

### DS 200 SERIES



Large Sized Systems  
750 IP subs  
100 IP trunks  
8-256 trunk lines  
16-32000 extensions

### PBX PHONES & WIRELESS PRODUCTS

Digital/IP Phones



Soft  
Phones



DECT  
Phones



DECT Base  
Stations



GSM FMC  
Gateways





- ▶ Online Communication: Voice, Video



- ▶ Presence: Integration of presence with other apps.



- ▶ Messaging: IM, Email, Fax, Voice, Video



- ▶ Conferencing: Voice, Video and Web



- ▶ Information Exchange: File/Screen Sharing



- ▶ Workflows: Common Contact Book, Integration with Web apps.



- ▶ Smart Applications: Desktop applications, smartphone applications, voice recognition, etc.





- ▶ Convergence of Video, Audio, Communications and Data
- ▶ Convergence of Sectors; Communications, Surveillance, IT, Finance
- ▶ Underlying value of IP network
  - Removes boundaries
  - Cost Effective
  - Creates business efficiency

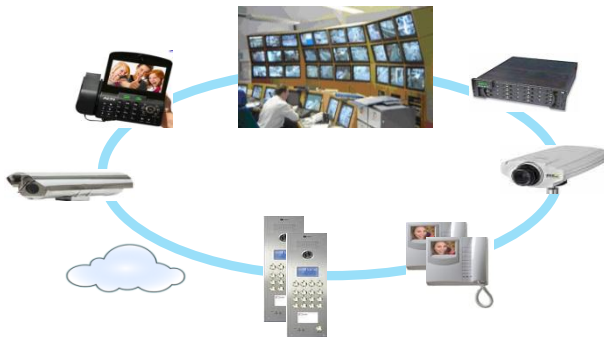


### ▶ Security Solutions Portfolio

- ▶ CCTV
- ▶ Intruder
- ▶ Apartment & Villa Entry
- ▶ Access Control

### ▶ PBX Integrated

- ▶ Unique
- ▶ Offers user advantages



- ▶ IBM / Dialogic (USA)
  - IVR Systems using SS7 links
  - Automated time telling service (Baku Telecom)
  
- ▶ NEC (Japan)
  - Radio link transceivers and their related management systems  
(Turkish Telecom, AVEA, Turkcell, Vodafone, Aztelekom)
  - 10 years of strong partnership (~10,000 hops of different capacities)
  - Turn-key projects
  
- ▶ ASCOM (France)
  - 10,721 payphones, remote systems and 10,000,000 smart cards  
(Turkish Telecom)
  
- ▶ Others
  - Cisco, Samsung...





# Thank You!

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[www.karel-electronics.com](http://www.karel-electronics.com)

