



## 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

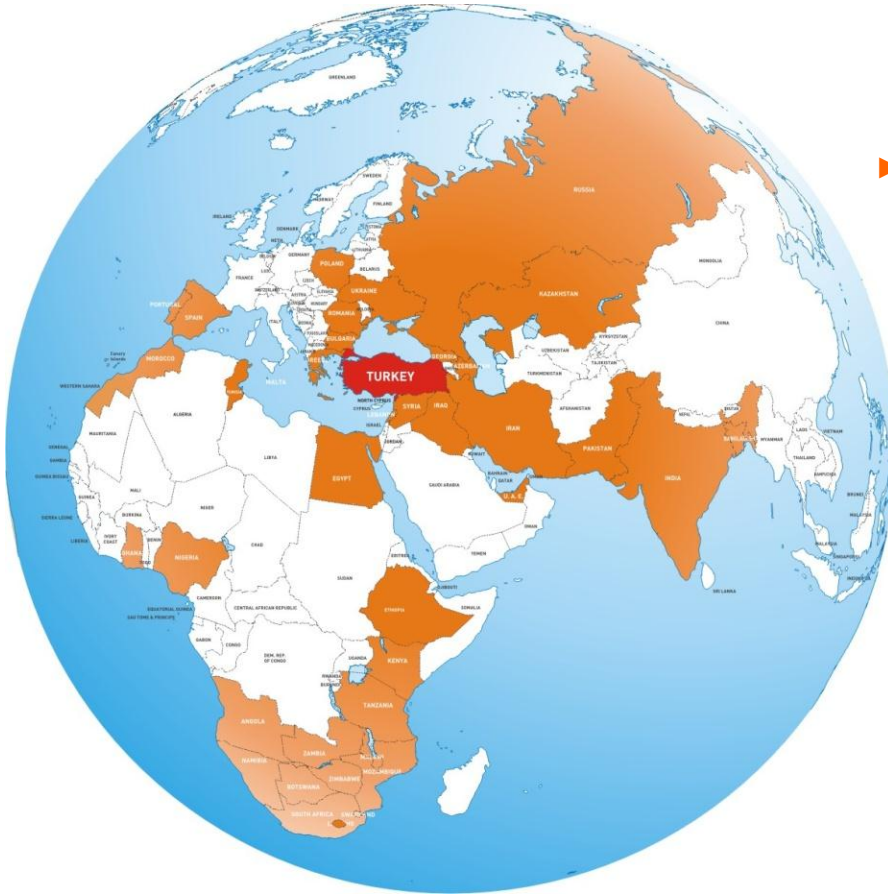


- ▶ Direct sales and sales via authorized dealers in:

- Turkey\***
- Azerbaijan

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

- |                                     |   |
|-------------------------------------|---|
| <input type="checkbox"/> Bangladesh | <input type="checkbox"/> Nigeria              |
| <input type="checkbox"/> Egypt      | <input type="checkbox"/> Poland               |
| <input type="checkbox"/> Ethiopia   | <input type="checkbox"/> Portugal             |
| <input type="checkbox"/> Georgia    | <input type="checkbox"/> Rep. of South Africa |
| <input type="checkbox"/> Ghana      | <input type="checkbox"/> Rwanda               |
| <input type="checkbox"/> Greece     | <input type="checkbox"/> Russia               |
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| <input type="checkbox"/> Iraq       | <input type="checkbox"/> Tanzania             |
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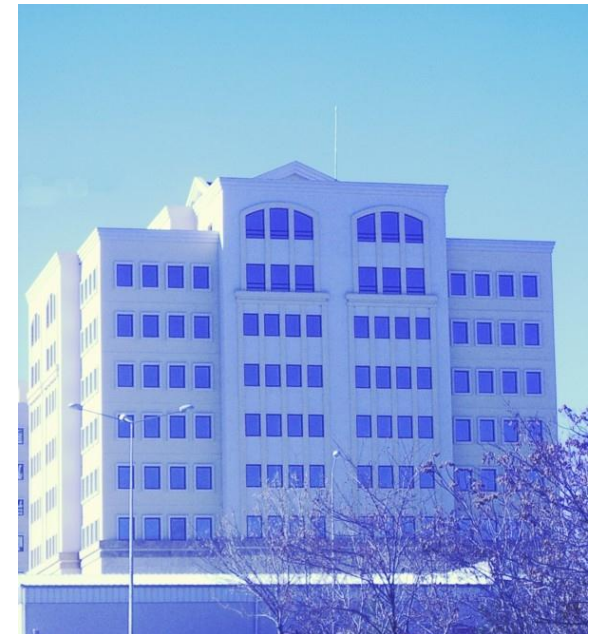


(\*) In Turkey:

- 5 Regional offices
- 325 Authorized dealers
- 500 Sales and After-Sales Service Points

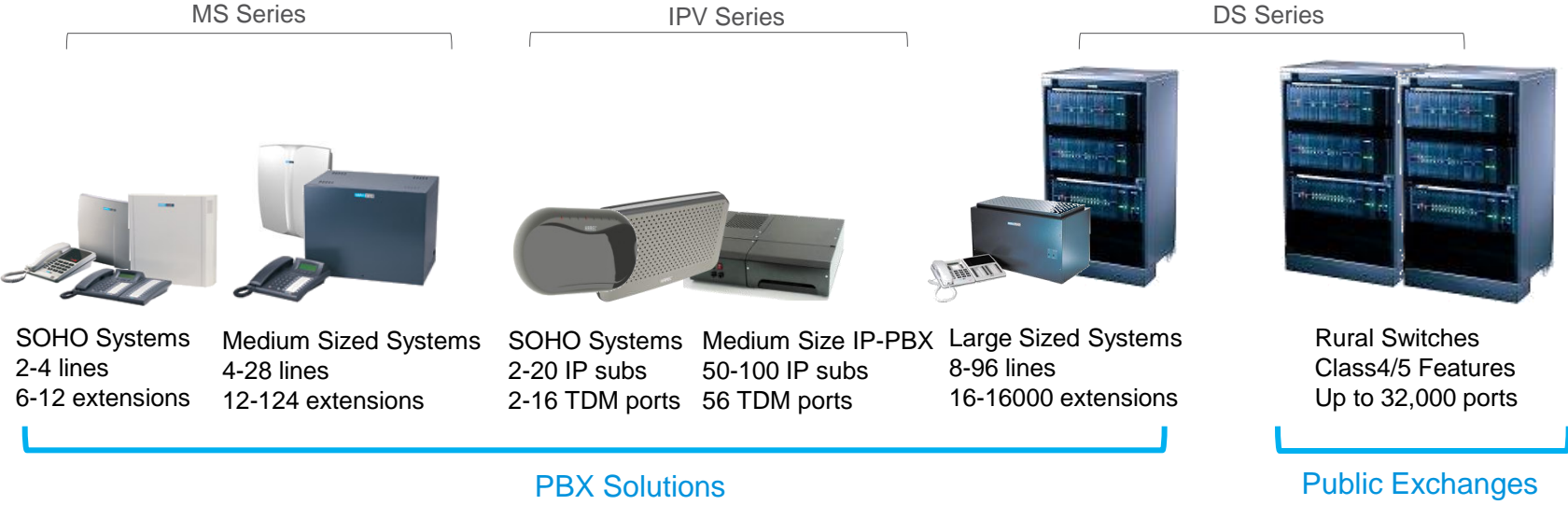


- ▶ CMMI level 3 approved development processes
- ▶ Located at Cyberpark, a prestigious academy-industry collaboration center within the Bilkent University campus outside of Ankara, Turkey
- ▶ Benefiting from significant state-sponsored research incentives in place through 2013
- ▶ 11 matrix-managed 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







## TELEPHONY

Feature/Digital/IP Phones



Caller ID/SMS Phones



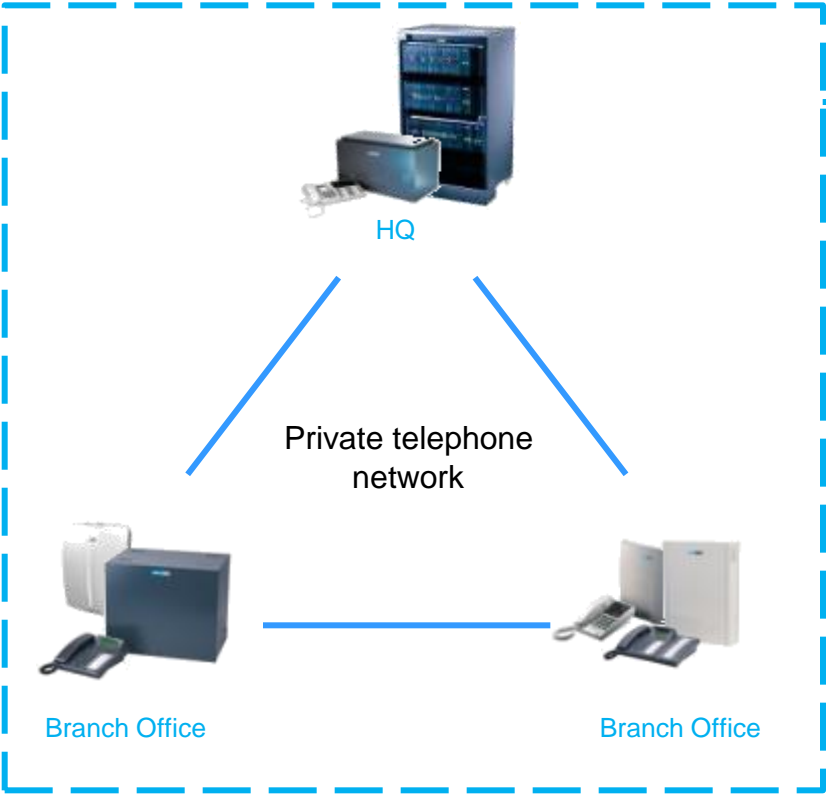
Soft Phones



DECT Base Stations

DECT Phones

## TELECOMMUNICATIONS WITHIN ORGANIZATIONS



## CONNECTION TO OTHER NETWORKS

PRI/BRI/E&M  
R1.5, R2, TWT



VoIP



Any interface



FCT  
GSM Gateway



## 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

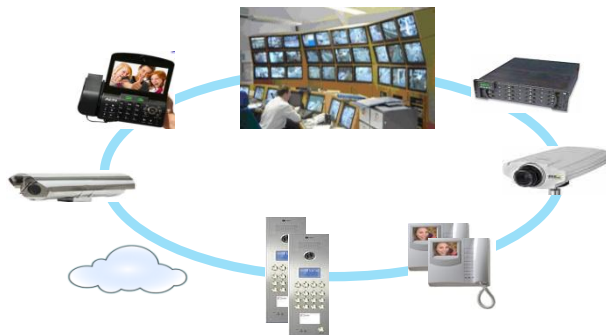


- ▶ Security Solutions Portfolio

- ▶ 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)

