

# Alcatel Telecom Product Catalogue



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| – Integrated Circuits                            |    |
| – Transport Automation                           |    |
| – Postal Automation                              |    |

## Switching Systems

- Francis Wellesplein1, B 2018 ANTWERP - Belgium  
Tel: +32.3 240 40 11 - Fax: +32.3 240 99 99
- 10, rue Latécoère - F 78141 VELIZY Cedex - France  
Tel: +33 (0)1 30 77 30 77 - Fax: +33 (0)1 30 77 97 50

## Transmission Systems

- Via Trento,30 - I 20059 VIMERCATE (MI) - Italia  
Tel: +39.39 6861 - Fax: +39.39 686 4871
- 1225 North Alma Road - MS 406-110  
TX 75081-2206 - RICHARDSON - U.S.A.  
Tel: +214 996 50 00 - Fax: +214 996 54 09

## Access Systems

- Ramirez de Prado 5-6, E 28045 MADRID - Spain  
Tel: +34.1 330 40 00 - Fax: +34.1 330 50 00

## Submarine Networks

- 30 rue Pierre Bérégovoy - F 92111 CLICHY - France  
Tel: +33 (0)1 47 56 69 00 - Fax: +33 (0)1 47 56 69 20

## Mobile Communication

- 10, rue Latécoère - F 78141 Vélizy Cedex (Headquarters)  
Tel: +33 (0)1 30 77 30 77 - Fax: +33 (0)1 30 77 49 87

## Business Systems

- 54, avenue Jean-Jaurès - F 92707 COLOMBES Cedex - France  
Tel: +33 (0)1 55 66 70 00 - Fax: +33 (0)1 55 66 49 99

## Radio, Space & Defense

### Space

- 5, rue Noël Pons - F 92737 NANTERRE Cedex - France  
Tel: +33 (0)1 46 52 62 00 - Fax: +33 (0)1 46 52 62 50

### Radio, Defense

- 5, rue Noël Pons - F 92737 NANTERRE Cedex - France  
Tel: +33 (0)1 46 52 30 00 - Fax: +33 (0)1 46 52 34 81

## Network Integration, Telecom Software & Services

- 33, rue Emeriau - F 75725 PARIS Cedex - France  
Tel: +33 (0)1 40 58 58 58 - Fax: +33 (0)1 45 77 88 61

## Others

### Optoelectronic Components

- Route de Villejust - F 91625 NOZAY Cedex - France  
Tel: +33 (0)1 64 49 49 12 - Fax: +33 (0)1 64 49 49 61

### Integrated Circuits

- Raketstraat, 62 - B 1130 BRUSSELS - Belgium  
Tel: +32.2 728 18 00 - Fax: +32.2 728 42 15

### Transport Automation

- Lorenzstrasse 10 - D 70435 STUTTGART - Germany  
Tel: +49 711 821 43795 - Fax: +49 711 821 46813

### Postal Automation

- 14 Avenue Raspail, F 94257 GENTILLY Cedex - France  
Tel: +33 (0)1 47 40 42 42 - Fax: +33 (0)1 45 47 82 21

# Switching Systems

## Switching Systems

- Alcatel 1000 Switching Systems Family

## Intelligent Networks

- Support Platforms
- Intelligent Network Platform
  - Corporate Platform
  - Open Platform
- Services/Applications
- Service Creation Environment

## Service Access Product

## Network Management

- Network Management Centers
- TMN Alcatel Management Applications (ALMA)

## Telecommunications Test Systems

## Network Operator Services

## Telecommunications Services Systems

| Description  | Product name  |
|--|---|
| <p><b>Switching Systems</b></p> <p><b><i>Alcatel 1000 Switching Systems Family</i></b><br/> Available in a multitude of configurations dedicated to one of the applications below or any mix of them:</p> <p>Local exchange</p> <ul style="list-style-type: none"> <li>- Plain old telephone service</li> <li>- Integrated services digital network</li> <li>- Centrex</li> <li>- Cordless Terminal Mobility</li> </ul> <p>Digital subscriber access unit</p> <p>Large remote digital concentrator</p> <p>Remote digital concentrator</p> <p>Small stand alone exchange</p> <p>National transit exchange</p> <p>International Gateway Exchange</p> <p>Operator Assisted Services</p> <p>Mobile switching center</p> <p>IN - Service switching point</p> <p>CCS7 Signalling transfer point (integrated)</p> <p>CCS7 Signalling transfer point (stand-alone)</p> |   |
|  | <p>Alcatel 1000 E10/S12 (POTS)</p> <p>Alcatel 1000 E10/S12 (ISDN)</p> <p>Alcatel 1000 E10/S12 (CENTREX)</p> <p>Alcatel 1000 E10/S12 (CTM)</p> <p>Alcatel 1000 E10 CSN</p> <p>Alcatel 1000 S12 ARCU</p> <p>Alcatel 1000 E10 CNE/S12 RSU</p> <p>Alcatel 1000 E10 COMPACT/<br/>S12 JSSA</p> <p>Alcatel 1000 E10/S12 (NTE)</p> <p>Alcatel 1000 E10/S12 (IGW)</p> <p>Alcatel 1000 E10 SYSOPE/S12 OAS</p> <p>Alcatel 1000 E10/S12 MSC</p> <p>Alcatel 1000 E10/S12 SSP</p> <p>Alcatel 1000 E10/S12 STP</p> <p>Alcatel 1070/ 1000 S12 STP</p> |
| <p><b>Intelligent Networks</b></p> <p><b><i>Support Platforms</i></b></p> <p>Service switching point</p> <p>Intelligent peripheral (external)</p> <p>Digital announcement machine (DAM)</p> <p>Service node (SN)</p> <p>Enhanced Services Platform (ESP)</p> <p>INTS</p>   |   |
|  | <p>Alcatel 1000 E10/S12 SSP</p> <p>Alcatel 1410</p> <p>Alcatel 1411</p> <p>Alcatel 1415</p> <p>Alcatel 1416</p> <p>Alcatel 1418</p>   |
| <p><b><i>Intelligent Network Platform</i></b></p> <p><b>Corporate platform</b></p> <p>Service control point</p> <p>Service management point</p> <p>PC provider applications</p> <p>PC subscriber applications</p>  |   |
|  | <p>Alcatel 1420</p> <p>Alcatel 1430</p> <p>Alcatel 1431</p> <p>Alcatel 1433</p>   |
| <p><b>Open Platform</b></p> <p>Service control point</p> <p>Service management point</p> <p>PC provider applications</p> <p>PC subscriber applications</p>   |   |
|  | <p>Alcatel 1425</p> <p>Alcatel 1435</p> <p>Alcatel 1436</p> <p>Alcatel 1438</p>   |
| <p><b><i>Services/Applications</i></b></p> <p>Services</p> <p>Applications (future)</p>  |   |
|  | <p>Alcatel 1440</p> <p>Alcatel 1445</p>   |

| Description  | Product name      |
|--|-------------------|
| <b>Service Creation Environment</b>  |                   |
| Service Design Center (SDC)  | Alcatel 1450      |
| Specification tool (SDB)   | Alcatel 1451      |
| Service Creation Environment (SCE) engineering tool                                | Alcatel 1452      |
| External Service provisioning point/<br>Service provisioning environment (SPP/SPE) | Alcatel 1455      |
| <b>Service Access Products</b>   |                   |
| ADSI platform  | Alcatel 1461      |
| ADSI based services  | Alcatel 1462      |
| ADSI tools   | Alcatel 1463      |
| <b>Network Management</b>  |                   |
| <b>Network Management Centers</b>  |                   |
| Network management center (Alcatel 1000 E10)                                       | Alcatel 1300 NMC  |
| Switch management center (Alcatel 1000 S12)  | Alcatel 1360 SMC  |
| Advanced terminal for<br>Alcatel 1000 S12 local O & M                              | Alcatel 1313 ATOM |
| Alcatel 1000 E10 local O & M (Unix based)  | Alcatel 1300 OMWS |
| Alcatel 1000 E10 local O & M (PC based)  | Alcatel 1300 OMPC |
| <b>TMN Alcatel Management Applications (ALMA)</b>                                  |                   |
| ALMA- Centrex  | Alcatel 1332      |
| ALMA-CCS7  | Alcatel 1333      |
| ALMA-CONF  | Alcatel 1337      |
| ALMA-Traffic Management  | Alcatel 1340      |
| <b>Telecommunications Test Systems</b>   |                   |
| Call simulator for analogue subscriber line (LCS)                                  | Alcatel 8602      |
| Call simulator for digital trunks (UCS-D)  | Alcatel 8603      |
| Call simulator for ISDN BA (ICS)   | Alcatel 8604      |
| Call simulator for ISDN PRA (PCS)  | Alcatel 8605      |
| Call simulator for functional and load test  | Alcatel 8610      |
| Protocol Test Tool   | Alcatel 8619      |
| PSTN quality and service test system   | Alcatel 8620 P    |
| <b>Network Operator Services</b>   |                   |
| Network & business consulting  | Alcatel 1021      |
| Management assistance  | Alcatel 1022      |
| Integration  | Alcatel 1023      |
| Documentation  | Alcatel 1024      |
| Training   | Alcatel 1025      |
| Operator support   | Alcatel 1026      |
| Network operations   | Alcatel 1027      |
| <b>Telecommunications Service Systems</b>  |                   |
| Call forwarding system (CFS)   | Alcatel 8672      |



# Transmission Systems

## **Plesiochronous High Order Mux/Line**

- Plesiochronous High Order Mux
- Plesiochronous Optical Fiber Line Equipment
- SDH/PDH Modems

## **Synchronous High Order Mux/Line**

- Synchronous Terminal Multiplexer
- Synchronous High Order Add Drop Multiplexer
- Synchronous Optical Fiber Line
- Optical Amplifier
- Optical Network Systems

## **Synchronous High Order Cross-Connect Systems**

## **Synchronisation Supply Unit (SSU)**

## **Professional Video/Audio**

- Audio Transmission
- Video Transmission

## **Network Management for Transmission**

- TMN Systems



| Description  | Product name       |
|--|--------------------|
| <b>Plesiochronous High Order Mux/Line</b>              |                    |
| <b>Plesiochronous High Order Mux</b>                   |                    |
| 2/8 Mbps Multiplexer (ETSI)                            | Alcatel 1621 MX    |
| 2/34 Mbps Multiplexer (ETSI)                           | Alcatel 1631 MX/II |
| 8/34 Mbps Multiplexer (ETSI)                           | Alcatel 1632 MX    |
| 34/140 Mbps Multiplexer (ETSI)                         | Alcatel 1643 MX/II |
| <b>Plesiochronous Optical Fiber Line Equipment</b>     |                    |
| 2 Mbps Fiber Optic Line Terminal (ETSI)                | Alcatel 1611 FL    |
| 8 Mbps Fiber Optic Line Terminal (ETSI)                | Alcatel 1622 FL    |
| 4x2 Mbps Fiber Optic Line Terminal Multiplexer (ETSI)  | Alcatel 1621 FL/II |
| 34 Mbps Fiber Optic Line Terminal (ETSI)               | Alcatel 1633 FL    |
| 16x2 Mbps Fiber Optic Line Terminal Multiplexer (ETSI) | Alcatel 1631 FL/II |
| 64x2 Mbps Fiber Optic Line Terminal Multiplexer (ETSI) | Alcatel 1641 FL    |
| Service Channel Equipment (3ch) (ETSI)                 | Alcatel 1692 FL    |
| <b>SDH/PDH Modems</b>                                  |                    |
| 155/45 or 155/34 Mbps modem (US and ETSI)              | Alcatel 1643 ML    |
| 155/140 Mbps modem (ETSI)                              | Alcatel 1644 ML    |
| <br>   |                    |
| <b>Synchronous High Order Mux/Line</b>                 |                    |
| <b>Synchronous Terminal Multiplexer</b>                |                    |
| 155 Mbps Terminal Multiplexer (ETSI)                   | Alcatel 1641 SMT   |
| <b>Synchronous High Order Add Drop Multiplexer</b>     |                    |
| VC12 Fiber Optic Extender (ETSI)                       | Alcatel 1631 FOX   |
| 155 Mbps Compact Add/Drop multiplexer (ETSI)           | Alcatel 1641 SM/C  |
| 155 Mbps Add/Drop multiplexer (ETSI)                   | Alcatel 1641 SM    |
| 622 Mbps Compact Add/Drop multiplexer (ETSI)           | Alcatel 1651 SM/C  |
| 622 Mbps Add/Drop multiplexer (ETSI)                   | Alcatel 1651 SM    |
| 622 Mbps Regenerator (ETSI)                            | Alcatel 1655 SR    |
| 2.5 Gbps Compact Add/Drop multiplexer (ETSI)           | Alcatel 1661 SM/C  |
| 2.5 Gbps Add/Drop multiplexer (ETSI)                   | Alcatel 1664 SM    |
| 2.5 Gbps Regenerator (ETSI)                            | Alcatel 1666 SR    |
| 10 Gbps Transport System (ETSI)                        | Alcatel 1674 SM    |
| OC-3 (155 Mbps) SONET Transport System (US)            | Alcatel 1603 SM    |
| OC-12 (622 Mbps) SONET Transport System (US)           | Alcatel 1612 SM    |
| OC-48 (2.5 Gbps) SONET Transport System (US)           | Alcatel 1648 SM    |
| OC-192 (10 Gbps) SONET Transport System (US)           | Alcatel 1692 SM    |
| <b>Synchronous Optical Fiber Line</b>                  |                    |
| 2.5 Gbps Fiber Optic Line System (ETSI)                | Alcatel 1664 SL    |
| <b>Optical Amplifier</b>                               |                    |
| Optical Amplifier/Wavelength Division Multiplexer (US) | Alcatel 1610 OA    |
| Optical Amplifier (ETSI)                               | Alcatel 1664 OA    |
| <b>Optical Network Systems</b>                         |                    |
| Wavelength Division Multiplexing System (ETSI)         | Alcatel 1686 WM    |
| <br>   |                    |
| <b>Synchronous High Order Cross-Connect Systems</b>    |                    |
| 4-3-1 Wideband Digital Cross-Connect (ETSI)            | Alcatel 1641 SX    |
| 4-4 Broadband Digital Cross-Connect (ETSI)             | Alcatel 1644 RN    |
| 3-1-0 Narrowband Digital Cross-Connect (US)            | Alcatel 1630 SX    |
| 3-1 Wideband Digital Cross-Connect (US)                | Alcatel 1631 SX    |
| 3-3 Broadband Digital Cross-Connect (US)               | Alcatel 1633 SX    |

| Description  | Product name  |
|--|---|
| <p><b>Synchronisation Supply Unit (SSU)</b><br/>Synchronisation Supply Unit</p>  | Alcatel 1611 SU   |
| <p><b>Professional Video/Audio</b></p> <p><b>Audio Transmission</b><br/>Flexible Audio Codec</p> <p><b>Video Transmission</b><br/><i>Dedicated Network</i><br/>Single Channel Optical Video Transmission System<br/>Multi-Ch Opt Video Transmission System</p> <p><i>Standardized Telecom Networks</i><br/>Multi-Chanel Video Codec (70/140/155 Mbps)<br/>140/155 Mbps Video Codec for PDH/SDH/SONET<br/>34 Mbps Video Codec<br/>MPEG Codec</p>  | <p>Alcatel 1703 AC</p> <p>Alcatel 1713 OV<br/>Alcatel 1715 OV</p> <p>Alcatel 1715 VC<br/>Alcatel 1718 VC<br/>Alcatel 1722 VC<br/>Alcatel 1761 VC</p>  |
| <p><b>Network Management for Transmission</b></p> <p><b>TMN Systems</b></p> <p><i>SONET Network Manager (US)</i><br/>Network and Element Management System</p> <p><i>SDH Network Manager (ETSI)</i><br/>Element Manager (SM, LS, MW)<br/>Element Manager (4/3/1 DXC)<br/>Regional Network Manager<br/>4/4 DXC Element &amp; Backbone Restoration Manager<br/>National Network Manager</p> <p><i>PDH/SDH Network Manager (ETSI)</i><br/>Element Manager [PDH (FL, MX, MW), SDH (SM, VC, SL)]<br/>Ring Manager</p> <p><i>Mediation Devices and Terminals (ETSI)</i><br/>Equipment Craft Terminal (SM, SL, VC, MW)<br/>Office Craft Terminal<br/>Mediation Equipment<br/>Remote Mediation Equipment</p> | <p>Alcatel 1320 NM</p> <p>Alcatel 1353 SH<br/>Alcatel 1353 WX<br/>Alcatel 1354 RM/2<br/>Alcatel 1354 NP<br/>Alcatel 1354 NN</p> <p>Alcatel 1353 EM<br/>Alcatel 1354 RM/1</p> <p>Alcatel 1320 NX<br/>Alcatel 1321 NX<br/>Alcatel 1322 NX<br/>Alcatel 1323 NX</p> |



# Access Systems

## Wireline Access

- Access Nodes
- Business Access and Leased Lines
- Stand-Alone Products

## Hybrid Fiber / Coax

## Wireless Access (WLL)

- Fixed Services
- Low Mobility

## Network Management

| Description   | Product name   |
|---|--|
| <p><b>Wireline Access</b></p> <p><b>Access Nodes</b></p> <p>2 Mbps subscriber access node<br/> Digital loop carrier<br/> SDH-DLC Access Node<br/> PDH-DLC Access Node<br/> Fiber in the Loop Access Node<br/> Active Optical Fiber Distribution Network</p> <p><i>Broadband multiservice access nodes</i></p> <p>High Speed Asymmetric Digital Subscriber Line<br/> Internet Access Node</p> <p><b>Business Access and Leased Lines</b></p> <p>2 Mbps inter-exchange trunk multiplexer<br/> 2 Mbps multiservice multiplexer<br/> Flexible multiplexer (8 ports, 2 Mbps)<br/> Drop/ insert multiplexer<br/> 1-0 digital cross connect (up to 128 ports, 2 Mbps)<br/> Compact 1-0 digital cross connect (up to 32 ports, 2 Mbps)<br/> Flexible multiplexer (4 ports, 2 Mbps)<br/> Compact flexible multiplexer (4 ports, 2 Mbps)<br/> 1-0 digital cross connect (up to 320 ports, 2 Mbps)<br/> Integrated multiplexer (TDM &amp; Frame relay)<br/> Desktop flexible multiplexer<br/> Large capacity 1-0 digital cross-connect</p> <p><b>Stand-alone Products</b></p> <p><b>Line Equipments</b></p> <p>Subscriber line equipment (2 Mbps, Fiber)<br/> Subscriber line equipment (2 Mbps, Copper)<br/> High bit rate Digital subscriber line (2 Mbps, HDSL)<br/> Subscriber line equipment (4 x 2 Mbps, fiber)<br/> Subscriber line equipment (16 x 2 Mbps, fiber)</p> <p><b>Digital Pairgain Systems</b></p> <p>10 channel digital pairgain system (64 kbps HDSL)<br/> 2 channel digital pairgain system (64 kbps)<br/> 4 channel digital pairgain system (32 kbps ADPCM)</p> <p><b>ISDN Network Terminations</b></p> <p>Basic access (2B1Q)</p> <p><b>Hybrid Fiber / Coax</b></p> <p>Optical fiber distribution network (FITL broadband) (ETSI)<br/> Analog video<br/> Digital video<br/> Telephony and ISDN</p> <p>Internet and On line services</p> | <p>Alcatel 1511 AN<br/> Alcatel 1530 AN<br/> Alcatel 1540 SD<br/> Alcatel 1540 PD<br/> Alcatel 1570 NB<br/> Alcatel 1575 AN</p> <p>Alcatel 1000 ADSL<br/> Alcatel 1131 RAN</p> <p>Alcatel 1510 MX<br/> Alcatel 1511 MX<br/> Alcatel 1513 MX<br/> Alcatel 1514 MX<br/> Alcatel 1515 CX<br/> Alcatel 1515 CX/C<br/> Alcatel 1517 MX<br/> Alcatel 1517 MX/C<br/> Alcatel 1517 CX<br/> Alcatel 1518 IAD<br/> Alcatel 1519 MX<br/> Alcatel 1630 SX</p> <p>Alcatel 1511 FL<br/> Alcatel 1511 PL<br/> Alcatel 1512 PL<br/> Alcatel 1521 FL<br/> Alcatel 1531 FL</p> <p>Alcatel 1560 PG<br/> Alcatel 1562 PG<br/> Alcatel 1564 PG</p> <p>Alcatel 1580 ID/4</p> <p>Alcatel 1570 BB<br/> Alcatel 1570 BB Core<br/> Alcatel 1570 BB DVB<br/> Alcatel 1570 BB<br/> Cabletelephony<br/> Alcatel 1570 BB<br/> Cablemodem</p> |

| Description   | Product name   |
|---|--|
| <p><b>Wireless Access (WLL)</b></p> <p><b>Fixed Services</b></p> <p>Radio Access system based on DECT for high density areas<br/>1.8/1.9 GHz<br/>Telephony, digital voice band data, ISDN BRA<br/>2 Mbps V5.x, a/b interfaces to L. E.</p> <p>Digital Microwave point to multipoint system, for low and medium density areas 1.5/2.4 GHz<br/>Telephony, digital voice band data, ISDN BRA<br/>2 Mbps V5.x, a/b interfaces to L. E.</p> <p>Phone shop container</p> <p><b>Low Mobility</b></p> <p>Personal Communication Services (CTM)<br/>PRA + interface to L.E.<br/>DECT/GAP radio interface at 1.9 GHz</p>  | <p>Alcatel 9500</p> <p>Alcatel 9800</p> <p>Alcatel 9910</p> <p>Alcatel 9550</p>  |
| <p><b>Network Management</b></p> <p>Equipment craft terminal (ETSI)<br/>Office craft terminal (ETSI)<br/>Mediation equipment (ETSI)<br/>Network management Q interface adapter<br/>Remote mediation equipment<br/>Subscriber line testing<br/>Data circuit testing<br/>Element manager<br/>Advanced access element manager</p> <p>Alcatel Management Applications (ALMA)<br/><i>ALMA-FITL for Alcatel 1570 NB</i><br/><i>ALMA-DLC for Alcatel 1530 AN</i><br/><i>ALMA-MSAN for Alcatel 1540 xx</i><br/><i>ALMA-CATV for Alcatel 1570 BB</i><br/><i>ALMA-Cabletelephony for Alcatel 1570 BB</i><br/><i>ALMA-Cablemodem for Alcatel 1570 BB</i><br/><i>ALMA-PDH node for Alcatel 151x MX/CX</i><br/><i>ALMA-WLL for Alcatel 9500/9500</i></p> <p>Cordless Terminal Mobility management<br/>Leased lines circuit manager<br/>Service manager for the access network<br/>Integrated business and service support system<br/>PDH node manager<br/>High Speed ADSL network management<br/>Remote Access Node network management center<br/>Remote Access Node service management center</p> | <p>Alcatel 1320 NX<br/>Alcatel 1321 NX<br/>Alcatel 1322 NX<br/>Alcatel 1322 QI/A<br/>Alcatel 1323 NX<br/>Alcatel 1348 ST<br/>Alcatel 1348 DT<br/>Alcatel 1353 EM<br/>Alcatel 1353 DN</p> <p>Alcatel 1353 CT<br/>Alcatel 1354 CM<br/>Alcatel 1355 DN<br/>Alcatel 1355 VD<br/>Alcatel 1353 AC<br/>Alcatel 1000 AWS<br/>Alcatel 1135 NMC<br/>Alcatel 1135 SMC</p> |



# **Submarine Networks**

**Single Channel Repeated Systems**

**Multiple Channel Repeated Systems (WDM)**

**Unrepeated Systems**



| Description  | Product name                                 |
|--|--|
| <p><b>Submarine Networks</b></p> <p>Complete range of submarine transmission networks with turnkey capability including all related services going from project finance to marine survey and installation. The different networks offered also include Alcatel Synchronous Transmission equipment with associated Network Management and are based on the following repeatered and unrepeatered systems:</p> |  |
| <p><b>Single Channel Repeatered Systems</b></p> <p>Optical Amplifier Line System (2.5 Gbps per fiber pair)</p> <p>Optical Amplifier Line System (5 Gbps per fiber pair)</p>  | <p>Alcatel OAL16</p> <p>Alcatel OAL32</p>    |
| <p><b>Multiple Channel Repeatered Systems (WDM)</b></p> <p>WDM System (up to 8 x 2.5 Gbps per fiber pair)</p> <p>WDM System (2 x 5 Gbps per fiber pair)</p>  | <p>Alcatel OALW16</p> <p>Alcatel OAL32-U</p> |
| <p><b>Unrepeatered Systems</b></p> <p>Unrepeatered System (622 Mbps per fiber pair)</p> <p>Unrepeatered System (2.5 Gbps per fiber pair)</p>   | <p>Alcatel UR4</p> <p>Alcatel UR16</p>       |

# Mobile Communication

## Cellular

- Digital Cellular Networks
- Network Sub-System
- Base Station Sub-System
- Container
- Radio Network Engineering Tools
- Functionality, Conformance & Performance Tools
- Transmission Links
- Cellular Phones
- Fixed Cellular Applications

| Description                                   | Product name                        |
|---|-------------------------------------|
| <b>Cellular</b>                               |                                     |
| <b>Digital Cellular Networks</b>              |                                     |
| GSM Standard, 900 MHz                         | Alcatel 900                         |
| DCS 1800 Standard, 1800 MHz                   | Alcatel 1800                        |
| <b>Network Sub-System</b>                     |                                     |
| <b>GSM</b>                                    |                                     |
| Mobile Switching Center                       | Alcatel 1000 E10 GSM                |
| Mobile Switching Center                       | Alcatel 1000 S12 GSM                |
| Mobile Switching Center                       | Alcatel 1000 E10 DCS                |
| Mobile Switching Center                       | Alcatel 1000 S12 DCS                |
| <b>US Standards</b>                           |                                     |
| Mobile Switching Center                       | Alcatel 1000 TDMA                   |
| Mobile Switching Center                       | Alcatel 1000 CDMA                   |
| Home Location Register                        | (GSM/DCS) Alcatel 1422              |
| Operations & Maintenance Center for NSS       | (GSM/DCS/TDMA/CDMA) Alcatel 1380    |
| <b>Base Station Sub-System</b>                |                                     |
| Base Transceiver Station Indoor 2TRX          | (GSM/DCS) Alcatel 900/1800 BTS I2   |
| Base Transceiver Station Indoor 4TRX          | (GSM/DCS) Alcatel 900/1800 BTS I4   |
| Base Transceiver Station Indoor 8TRX          | (GSM/DCS) Alcatel 900/1800 BTS I8   |
| Base Transceiver Station Indoor 3x2TRX        | (GSM/DCS) Alcatel 900/1800 BTS I3x2 |
| Base Transceiver Station Outdoor 2TRX         | (GSM/DCS) Alcatel 900/1800 BTS O2   |
| Base Transceiver Station Outdoor 4TRX         | (GSM/DCS) Alcatel 900/1800 BTS O4   |
| Base Transceiver Station Outdoor 3x2TRX       | (GSM/DCS) Alcatel 900/1800 BTS O3x2 |
| Micro Base Transceiver Station 1TRX           | (GSM/DCS) Alcatel 900/1800 μBTS 1   |
| Micro Base Transceiver Station 2TRX           | (GSM/DCS) Alcatel 900/1800 μBTS 2   |
| Base Station Controller                       | (GSM/DCS) Alcatel 900/1800 BSC      |
| Operations & Maintenance Center for BSS       | (GSM/DCS) Alcatel 900/1800 OMC-R    |
| <b>Container</b>                              |                                     |
| Complete System including NSS, BSS            | (GSM/DCS)                           |
| <b>Radio Network Engineering Tools</b>        |                                     |
| Radio Measurement & Cell. Verification System | (GSM/DCS) Alcatel 954               |
| Radio Network Planning & Optimization         | (GSM/DCS) Alcatel 955               |

| Description   | Product name         |
|---|----------------------|
| <b>Functionality, Conformance &amp; Performance Tools</b> |                      |
| Universal Call Simulator (GSM/DCS)                        | Alcatel 8603         |
| Telecom Test System (GSM/DCS)                             | Alcatel 8610         |
| Protocol Test Tool (GSM/DCS)                              | Alcatel 8619         |
| Roaming Test System (GSM/DCS)                             | Alcatel 8620         |
| Automated Test Platform (GSM/DCS)                         | Alcatel 8650         |
| <b>Transmission Links</b>                                 |                      |
| Digital Microwave Link Between BTS & BTS/BSC (PDH)        | Alcatel 9400 family  |
| Digital Microwave Link Between BTS & BTS/BSC (SDH)        | Alcatel 9600 family  |
| <b>Cellular Phones</b>                                    |                      |
| GSM mobile phone  | Alcatel HC800/HC1000 |
| GSM Handheld for the Professional Market                  | One Touch Pro        |
| GSM low end Handheld for the Mass Market                  | One Touch Easy       |
| <b>Fixed Cellular Applications</b>                        |                      |
| Smart Card Payphone (GSM)                                 | Alcatel 9920 GSM     |



# Business Systems

## Voice Communications Systems

- Micro PBXs
- Small PBXs
- Medium & large PBXs

## Data Networks

- Data Switching Products

## Data Communications Systems

## Voice & Data Applications

- Sectorial Applications
- Generic Applications

## Network Management Systems and Tools

- Voice and Data Oriented
- Data Oriented

## Voice & Data Terminals

- Dedicated Voice Terminals
- Standard Terminals

## Image

## Cellular Phones

| Description                            | Product name                           |
|--|--|
| <b>Voice Communications Systems</b>    |  |
| <b>Micro PBXs</b>                      |  |
| Micro PBX                              | Alcatel 2740/ 2750                     |
| 3/8 Extensions analog Key system       | Alcatel 5101/5102                      |
| <b>Small PBXs</b>                      |  |
| Digital PBX                            | Alcatel 4100/4200 K                    |
| ISDN PBX                               | Alcatel 4200 C                         |
| ISDN PBX                               | Alcatel 4200 E                         |
| <b>Medium &amp; large PBXs</b>         |  |
| Digital PBX                            | Alcatel 4300 S/M                       |
| Digital PBX                            | Alcatel 4300 L                         |
| Native Broadband & Narrowband ISDN PBX | Alcatel 4400                           |
| <b>Data Networks</b>                   |  |
| <b>Data Switching Products</b>         |  |
| Access Concentrator-switch             | Alcatel 1100 ACX                       |
| X25/ Frame Relay Switch                | Alcatel 1100 PSX                       |
| Frame Relay/X25 Switch                 | Alcatel 1100 TPX                       |
| Frame Relay Switch                     | Alcatel 1100 HSS<br>Series 400         |
| Multiservice network Switch (ATM/FR)   | Alcatel 1100 HSS<br>Series 700         |
| High performance LAN switching         | Alcatel 1100 LSS<br>Series 500         |
| Frame relay assembly disassembly       | Alcatel 1100 QIK<br>Series 100 and 200 |
| Voice over frame relay                 | Alcatel 1100 QIK<br>model 301 and 305  |
| <b>Data Communications Systems</b>     |  |
| High-end Multiplexers                  | Alcatel 1110                           |
| Narrow-band Multiplexers               | Alcatel 1110                           |
| Network Management                     | Alcatel 1110                           |
| Low-end Multiplexers                   | Alcatel 1111                           |
| Network Management                     | Alcatel 1111                           |
| Token Ring Stackable Hub               | Alcatel 8420-S27                       |
| Ethernet Stackable Hub                 | Alcatel 8420-S28                       |
| FDDI Stackable Hub                     | Alcatel 8420-S29                       |
| Medium Range Multimedia Chassis        | Alcatel 8420-S30/S33                   |
| High End Network Integration Platform  | Alcatel 8420-S50/S55                   |
| Low End Stackable Solution             | Alcatel 8420-BSK                       |
| High End Stackable Solution            | Alcatel 8420-BDS                       |

| Description  | Product name  |
|--|---|
| <p>Network Management Platform</p> <p>Ethernet 10/100 Mbps Switch</p> <p>Routers Management Software</p> <p>Access Routers 1000 series</p> <p>Access Routers 2500 series</p> <p>Access Routers 4000 series</p> <p>Backbone Routers 7000 series</p> <p>Mid-Size Multi-Protocol Remote Access Servers</p> <p>High-End Multi-Protocol Remote Access Servers</p> <p>Personal ISDN Remote Access Router</p> | <p>Alcatel 8420-OPT</p> <p>Alcatel 8420-28k/58k</p> <p>Alcatel 8460-C00</p> <p>Alcatel 8460-C10</p> <p>Alcatel 8460-C25</p> <p>Alcatel 8460-C40</p> <p>Alcatel 8460-C70</p> <p>Alcatel 8465</p> <p>Alcatel 8465</p> <p>Alcatel 8465</p> |
| <p><b>Voice &amp; Data Applications</b></p>  |   |
| <p><b>Sectorial Applications</b></p>   |   |
| <p>Hotel PBX</p> <p>Hotel Link Package</p> <p>Hospital PBX</p>   |   |
| <p><b>Generic Applications</b></p>   |   |
| <p>Automatic Call Distribution</p> <p>Voice Processing System</p> <p>Voice Processing System</p> <p>Call Processing Server</p> <p>Voice Mail System</p> <p>Voice &amp; Fax Messaging Server</p> <p>Fax Server</p> <p>Screen Based Console</p> <p>Call Accounting Package</p> <p>DECT Wireless Application</p> <p>Computer Telephone Integration</p>  | <p>Alcatel 4610 II</p> <p>Alcatel 4620</p> <p>Alcatel 4625</p> <p>Alcatel 4630</p> <p>Alcatel 4635</p> <p>Alcatel 4855</p> <p>Alcatel 4058</p> <p>Alcatel 4715</p> <p>Alcatel 4672/4674</p> <p>Alcatel 4901/4953</p>                    |
| <p><b>Network Management Systems and Tools</b></p>   |   |
| <p><b>Voice and Data Oriented</b></p>  |   |
| <p>The PBX Management Tool</p> <p>Network Management Center</p>  | <p>Alcatel 4740</p> <p>Alcatel 4755</p>   |
| <p><b>Data oriented</b></p>  |   |
| <p>Management Application</p> <p>LAN Management System</p> <p>Management Application</p> <p>LAN Management Platform</p>  | <p>Alcatel 8400-CW</p> <p>Alcatel 8400-EZV</p> <p>Alcatel 8400-OPT</p> <p>Alcatel 8400-SNM</p>  |



| Description   | Product name   |
|---|--|
| <p><b>Voice &amp; Data Terminals</b></p> <p><b>Dedicated Voice Terminals</b></p> <p>Digital Entry Level Set</p> <p>Digital Workstations</p> <p>Digital Teamware</p> <p>Digital Dedicated Sets</p> <p>Dedicated Sets</p> <p>Dedicated Sets</p> <p>DECT Wireless Terminal</p> <p><b>Standard Terminal</b></p> <p>Answering Machine</p> <p>Corded Telephones</p> <p>Fax Terminals</p> <p>Analog Corded Sets</p> <p>The new CTO Cordless Range</p> <p>Residential DECT</p> <p>Smartcard Sets Applications</p> <p>ISDN Advanced Telephone</p> <p><b>Image</b></p> <p>ISDN Videophone</p> <p>The Plug and play Desktop Videoconferencing System</p> <p>High Performance Desktop Videoconferencing</p> <p>Value Multipoint Conferencing Server</p> <p>Conferencing Server</p> <p>Group Videoconferencing Systems</p> <p>High Level Group Videoconferencing Systems</p> <p>The Compact Videoconferencing System</p> <p><b>Cellular Phones</b></p> <p>GSM mobile phone</p> <p>GSM Handheld for the Professional Market</p> <p>GSM low end Handheld for the Mass Market</p> | <p>Alcatel 4003</p> <p>Alcatel 4011/4012</p> <p>Alcatel 4023/4034</p> <p>Alcatel 4040</p> <p>Alcatel 412X</p> <p>Alcatel 430X/432X</p> <p>Alcatel 4074</p> <p>Recital 100,200,300,400</p> <p>Alcatel Audience, 21XX, Harmony</p> <p>Alcatel 37XX</p> <p>Consul, Signo, Sirio, Sirio Plus, Prisma, Maestro, Bergen, Vox 415/420/430</p> <p>Eole 100, 200, 400</p> <p>Eole 300</p> <p>Alcatel 2690</p> <p>Alcatel 2526</p> <p>Alcatel 2810</p> <p>Alcatel 2838</p> <p>Alcatel 3252</p> <p>Alcatel 3253/3255</p> <p>Alcatel 3264</p> <p>Alcatel 3266</p> <p>Alcatel 3276 S/3276</p> <p>Alcatel 3284/3285</p> <p>Alcatel 3296</p> <p>Alcatel HC800/HC1000</p> <p>One Touch Pro</p> <p>One Touch Easy</p> |

# Radio, Space & Defense

## Radiocommunications

- Microwave Radio Links
- Satellite Earth Stations & Gateways
- Terrestrial Flight Telecommunication Systems (TFTS)

## Space

- Communication Satellite Systems
- Communication Payload Subsystem and Equipment
- Satellite Platform Subsystem and Equipment
- Ground Control Equipment
- Ground Communication Equipment
- Earth Observation Subsystems
- Mobile Satellite Communications Systems (Euteltracs)

## Defense & Security

- Strategic Networks
- Tactical Communications
- Satellite Communications
- C<sup>3</sup>I Systems
- Private Mobile Radio

## Air Navigation Systems

- Landing Systems
- En-Route Nav aids Products
- Peripheral and Mobile Equipment
- Integrated ATC and Airport Systems
- Satellite Navigation Augmentation Systems

| Description  | Product name      |
|--|-------------------|
| <b>Radiocommunications</b>   |                   |
| <b>Microwave Radio Links</b>   |                   |
| <i>CEPT Microwave Catalogue</i>  |                   |
| <b>Long Haul Digital Microwave Radio Links (SDH Networks)</b>  |                   |
| Family of synchronous equipment intended for international and national trunk routes, regional links in synchronous (and plesiochronous) networks: |                   |
| 155 Mbps or 140 Mbps   | Alcatel 9639 LH   |
|  | Alcatel 9640 LH   |
|  | Alcatel 9647 LH   |
|  | Alcatel 9662 LH   |
|  | Alcatel 9667 LH   |
|  | Alcatel 9668 LH   |
|  | Alcatel 9674 LH   |
|  | Alcatel 9681 LH   |
|  | Alcatel 9611 LH   |
| 21x2 Mbps or 51 Mbps   | Alcatel 9674 LM   |
|  | Alcatel 9684 LM   |
| <b>Urban Digital Microwave Radio Links (SDH Networks)</b>  |                   |
| Family of synchronous equipment intended for short haul public, private and cellular synchronous networks:   |                   |
| 155 Mbps or 140 Mbps   | Alcatel 9613 UH   |
|  | Alcatel 9618 UH   |
| 21x2 Mbps or 51 Mbps   | Alcatel 9615 UM   |
|  | Alcatel 9618 UM   |
| <b>Transportable Digital Microwave Radio Links (SDH Networks)</b>  |                   |
| Family of equipment intended for telephony, data or video digital transmission   |                   |
| 155 Mbps or 140 Mbps   |                   |
| or 3x34 Mbps   | Alcatel 9667 TH   |
|  | (6.4-7.1 GHz)     |
| <b>High Capacity Digital Microwave Radio Links (PDH Networks)</b>  |                   |
| Family of equipment intended for international and national back-bone trunk route:   |                   |
| 140 Mbps   | Alcatel 9439 LH   |
|  | Alcatel 9440 LH   |
|  | Alcatel 9447 LH   |
|  | Alcatel 9462 LH   |
|  | Alcatel 9467 LH   |
|  | Alcatel 9468 LH   |
|  | Alcatel 9481 LH   |
|  | Alcatel 9411 LH   |
| <b>Long Haul Low/Medium Capacity Digital Microwave Radio Links (PDH Networks)</b>  |                   |
| Family of equipment for the roll-out of public, private and cellular networks in rural or suburban zones:  |                   |
| 2x2, 4x2, 8x2, 16x2+2, 1x8, 2x8, 3x8+4x2,  |                   |
| 4x8+2, 34+2 Mbps   | Alcatel 9420 LX   |
|  | Alcatel 9470 LX   |
|  | (1.7-2.7 GHz)     |
|  | (7.1-8.5 GHz)     |
| <b>Short Haul Low/Medium Capacity Digital Microwave Radio Links (PDH Networks)</b>   |                   |
| Family of equipment for the roll-out of public, private and cellular networks in urban or suburban zones:  |                   |
| 2x2, 4x2, 8x2, 16x2, 1x8, 2x8,   |                   |
| 3x8+4x2, 4x8, 34+2 Mbps  | Alcatel 9413 UX   |
|  | Alcatel 9415 UX   |
|  | Alcatel 9418 UX   |
|  | Alcatel 9423 UX   |
|  | Alcatel 9425 UX   |
|  | Alcatel 9428 UX   |
|  | Alcatel 9438 UX   |
|  | (12.75-13.25 GHz) |
|  | (14.25-15.35 GHz) |
|  | (17.7-19.7 GHz)   |
|  | (21.2-23.6 GHz)   |
|  | (24.5-26.5 GHz)   |
|  | (27.5-29.5 GHz)   |
|  | (37.0-39.5 GHz)   |
| (*) RF direct modulation   |                   |

| Description  | Product name  |
|--|---|
| <p><b>Very Low Capacity Digital Microwave Radio Links (PDH Networks)</b><br/> Family of equipment intended for short haul public, private and cellular networks, and for end-subscriber connection:</p> <p>256 kbps to 2 Mbps (330-400 MHz)<br/> (400-470 MHz)</p> <p>256 kbps to 2x2 Mbps (620-750 MHz)<br/> (795-890 MHz)<br/> (890-960 MHz)<br/> (1350-1520 MHz)<br/> (1410-1550 MHz)<br/> (2100-2300 MHz)<br/> (2300-2500 MHz)</p> | <p>Alcatel 9203 DXR<br/> Alcatel 9204 DXR<br/> Alcatel 9207 DXR<br/> Alcatel 9208 DXR<br/> Alcatel 9209 DXR<br/> Alcatel 9214 DXR<br/> Alcatel 9215 DXR<br/> Alcatel 9222 DXR<br/> Alcatel 9224 DXR</p> |
| <p><b>Transportable Microwave Radio Links (PDH Networks)</b><br/> Family of equipment intended for telephony, data or video digital transmission or analog TV:</p> <p>34 Mbps or TV+2/4 sound channels (6.4-7.1 GHz)<br/> (7.1-7.8 GHz)<br/> (7.8-8.4 GHz)<br/> (10.4-10.7 GHz)<br/> (12.5-13.25 GHz)<br/> (21.2-23.6 GHz)</p>   | <p>Alcatel 9406 TM<br/> Alcatel 9407 TM<br/> Alcatel 9408 TM<br/> Alcatel 9410 TM<br/> Alcatel 9413 TM<br/> Alcatel 9422 TM</p>   |
| <p><b>Integrated Network Management Systems</b></p>  | <p>Alcatel 1300</p>   |
| <p><b>North American Standard Microwave Catalogue</b></p>  |   |
| <p><b>High Capacity SONET Digital Microwave Radio Links (MDR 4000s)</b><br/> 2x52, 3x52, 155 Mbps (1.7-2.3 GHz)<br/> (3.7-4.2 GHz)<br/> (4.4-5.0 GHz)<br/> (5.9-6.4 GHz)<br/> (6.4-7.1 GHz)<br/> (7.1-8.5 GHz)<br/> (10.7-11.7 GHz)</p>  | <p>Alcatel 9620 NH<br/> Alcatel 9640 NH<br/> Alcatel 9647 NH<br/> Alcatel 9662 NH<br/> Alcatel 9667 NH<br/> Alcatel 9678 NH<br/> Alcatel 9611 NH</p>  |
| <p><b>Medium Capacity SONET Digital Microwave Radio Links (MDR 4000s)</b><br/> 52 Mbps (1.7-2.3 GHz)<br/> (3.7-4.2 GHz)<br/> (4.4-5.0 GHz)<br/> (5.9-6.4 GHz)<br/> (6.4-7.1 GHz)<br/> (7.1-8.5 GHz)<br/> (10.7-11.7 GHz)</p>   | <p>Alcatel 9620 NM<br/> Alcatel 9640 NM<br/> Alcatel 9647 NM<br/> Alcatel 9662 NM<br/> Alcatel 9667 NM<br/> Alcatel 9678 NM<br/> Alcatel 9611 NM</p>  |
| <p><b>High Capacity Digital Microwave Radio Links (MDR 4000e/MDR 4000i)</b><br/> 2x45, 3x45 Mbps (North American Standard)/ (1.7-2.3 GHz)<br/> 2x34, 3x34, 4x34 Mbps (ETSI) (3.7-4.2 GHz)<br/> (4.4-5.0 GHz)<br/> (5.9-6.4 GHz)<br/> (6.4-7.1 GHz)<br/> (7.1-8.5 GHz)<br/> (10.7-11.7 GHz)</p>   | <p>Alcatel 9420 NH/CH<br/> Alcatel 9440 NH/CH<br/> Alcatel 9447 NH/CH<br/> Alcatel 9462 NH/CH<br/> Alcatel 9467 NH/CH<br/> Alcatel 9478 NH/CH<br/> Alcatel 9411 NH/CH</p>                               |
| <p><b>Medium Capacity Digital Microwave Radio Links (MDR 4000e/MDR 4000i)</b><br/> 45 Mbps (North American Standard)/ (1.7-2.3 GHz)<br/> 34 Mbps (ETSI) (3.7-4.2 GHz)<br/> (4.4-5.0 GHz)<br/> (5.9-6.4 GHz)<br/> (6.4-7.1 GHz)<br/> (7.1-8.5 GHz)<br/> (10.7-11.7 GHz)</p>   | <p>Alcatel 9420 NM/CM<br/> Alcatel 9440 NM/CM<br/> Alcatel 9447 NM/CM<br/> Alcatel 9462 NM/CM<br/> Alcatel 9467 NM/CM<br/> Alcatel 9478 NM/CM<br/> Alcatel 9411 NM/CM</p>                               |

| Description  | Product name  |
|--|---|
| <p><b>Low Capacity Digital Microwave Radio Links (MDR 6000/MDR 6000i)</b><br/> 2x1.5, 4x1.5, 8x1.5, 12x1.5, 16x1.5 Mbps (North American Standard) / (1.7-2.7 GHz)<br/> 2x2, 4x2, 8x2, 12x2 or 16x2 Mbps (ETSI) (5.8-7.1 GHz)<br/> (7.1-7.7 GHz)<br/> (7.1-8.5 GHz)<br/> (10.5-10.7 GHz)<br/> (10.7-11.7 GHz)</p> | <p>Alcatel 9420 NL/CL<br/> Alcatel 9465 NL/CL<br/> Alcatel 9470 NL/CL<br/> Alcatel 9478 NL/CL<br/> Alcatel 9410 NL/CL<br/> Alcatel 9411 NL/CL</p>       |
| <p><b>Short Haul Low/Medium Capacity Digital Microwave Radio Links (MDR 7000)</b><br/> 2x1.5, 4x1.5, 8x1.5, 16x1.5, 45 Mbps (14.4-15.35 GHz)<br/> (17.7-19.7 GHz)<br/> (21.2-23.6 GHz)<br/> (38.6-40.0 GHz)</p>  | <p>Alcatel 9415 NU<br/> Alcatel 9418 NU<br/> Alcatel 9423 NU<br/> Alcatel 9438 NU</p>   |
| <p><b>Satellite Transmission</b></p>   |   |
| <p><b>Earth Stations &amp; Gateways</b></p>  |   |
| <p><b>Monitoring and Control System</b></p>  | <p>Alcatel 9700 MC</p>  |
| <p><b>Network Management System</b><br/> DAMA &amp; BOD network control center for earth stations</p>  | <p>Alcatel 9700 NA</p>  |
| <p><b>DCME for open Networks (Intelsat &amp; Eutelsat)</b><br/> Multidestination satellite application with TDMA or IDR satellite carriers</p>   | <p>Alcatel 9700 QA</p>  |
| <p><b>Earth Stations Antennas</b></p>  |   |
| <p>C Band</p>  | <p>21meter Alactel 9705 AZ<br/> 18 meter Alcatel 9705 AA<br/> 13 meter Alcatel 9705 AY<br/> 11 meter Alcatel 9705 AD<br/> 5.5 meter Alcatel 9705 AX</p> |
| <p>Ku Band</p>   | <p>13 meter Alcatel 9707 AY<br/> 3.7 meter Alcatel 9707 AK<br/> 1.8 meter Alcatel 9707 AE</p>   |
| <p>S Band</p>  | <p>13 meter Alcatel 9704 AY</p>   |
| <p><b>Up/Down Converters for Earth Stations</b></p>  |   |
| <p>C Band: up converter</p>  | <p>Alactel 9705 CC</p>  |
| <p>down converter</p>  | <p>Alactel 9705 CD</p>  |
| <p>Ku Band: up converter</p>   | <p>Alactel 9707 CE</p>  |
| <p>down converter</p>  | <p>Alactel 9707 CF</p>  |
| <p><b>Integrated RF Transceivers for Earth Stations</b></p>  |   |
| <p>Medium-rate stations and VSATs</p>  |   |
| <p>C Band: 2W, 5W, 10W, 20W, 40W</p>   | <p>Alactel 9705 RA</p>  |
| <p>Ku Band: 2W, 4W, 8W, 16W, 20W</p>   | <p>Alactel 9707 RA</p>  |
| <p><b>International Program Exchange</b></p>   |   |
| <p>Video and/or sound</p>  |   |
| <p><b>Multiservice VSAT Satellite System</b></p>   |   |
| <p>VSAT Stations for telephony, fax &amp; data applications</p>  |   |
| <p>VSAT MicroStation</p>   |   |
| <p><b>Transportable Earth Stations</b></p>   |   |
| <p>Rapid deployment &amp; temporary links ( TV/Voice/Data) - SNG</p>   |   |
| <p><b>International and Point-to-Point Communications (IBS/IDR terminal - 48 kbps - 8 Mbps)</b></p>  |   |
| <p>Intelsat IBS &amp; Eutelsat SMS;</p>  |   |
| <p>Intelsat IDR &amp; Eutelsat IDC (international telephony)</p>   |   |
| <p><b>Gateway RF Subsystem for Globalstar</b></p>  | <p>Alcatel 9775</p>   |
| <p><b>Feeder Link Stations for WorldStar Digital Audio Broadcasting</b></p>  | <p>Alcatel 9796</p>   |

| Description  | Product name        |
|--|---------------------|
| <p><b>Terrestrial Flight Telecommunication System (TFTS)</b></p> <p><b>Ground Stations Systems</b><br/> Air to ground communication system for airline passengers (TDM/TDMA)<br/> Worldwide frequency bands (WARC 92)<br/> ETSI specification</p> <p><b>Space</b></p> <p><b>Communication Satellite Systems</b></p> <p><b>Overall Satellite Based Systems</b><br/> Fixed Communications (FSS)<br/> Wideband Multimedia<br/> Mobile Communications (MSS)<br/> Messaging/Localization<br/> Video Broadcasting (DBS)<br/> Audio Broadcasting (DAB)<br/> Aeronautical Communication/Navigation<br/> Military Communications</p> <p><b>Communication Satellites</b></p> <p><b>Satellite Payloads</b><br/> Civil Communication<br/> Military Communication<br/> Aeronautical Communication/Navigation</p> <p><b>Ground Control Systems</b></p> <p><b>Communication Payload Subsystem and Equipment</b></p> <p><b>Repeater (L to Ka Bands)</b><br/> Receiver/Channel Amplifier<br/> Frequency Generation Units<br/> Up/Down Converters (R.F/R.F and R/F/I.F)<br/> Master Local Oscillator<br/> Channel Amplifier<br/> Microwave Filters/Multiplexers<br/> Solid State Power Amplifier (SSPA)<br/> Low voltage Power Converter (EPC)<br/> Traveling Wave Tube Amplifier (TWTA)<br/> High voltage Power Converter (EPC)<br/> Surface Acoustic Wave (SAW) I.F. Processor<br/> Surface Acoustic Wave (SAW) Filters/Devices<br/> Digital Processor<br/> Baseband Processor<br/> I.F Processor<br/> Inter Satellite Link</p> <p><b>Antennas (L to Ka Bands)</b><br/> Passive Antenna<br/> Active Antenna with Beam Forming Network (BFN)<br/> Antenna Pointing Mechanism Electronics (APM-E)</p> <p><b>Satellite Platform Subsystem and Equipment</b></p> <p><b>Telemetry Tracking and Command (TT&amp;C)</b><br/> TTC Transponder (S Band)<br/> Spread Spectrum Transponder (S Band)<br/> Command Receiver (C, X, Ku, Ku+, Ka Band)<br/> Telemetry Transmitter (C, X, Ku, Ka Band)<br/> Beacon (C, X, Ku, Ka band)<br/> TC Demodulator</p> | <p>Alcatel 9810</p> |

| Description  | Product name        |
|--|---------------------|
| <p><b>Data Handling</b><br/> Payload Interface Unit<br/> On Board Controller<br/> TC Decoder</p> <p><b>Power</b><br/> Solar Electric Power Transfer Assembly (SEPTA)<br/> Power Control Unit (PCU)/ Battery Management<br/> Power Distribution Unit (PDU)<br/> Solid State Power Controllers (SSPC)<br/> DC/DC Converters<br/> Batteries</p> <p><b>Propulsion</b><br/> Plasmic Propulsion Power Conditioning</p> <p><b>Ground Control Equipment</b></p> <p><b>Satellite Control</b><br/> TT&amp;C Station<br/> Baseband Equipment<br/> Monitoring Control System</p> <p><b>Mission Control</b><br/> Mission Control Center (MCC)<br/> In orbit Testing (IOT)<br/> Payload Supervision<br/> Communication Survey &amp; Monitoring (CSM)</p> <p><b>Ground Communication Equipment</b></p> <p><b>Civil Communications</b><br/> ATM Switch for Satellite (CADENZA)</p> <p><b>Earth Observation Subsystems</b></p> <p><b>Microwave Instruments</b><br/> Synthetic Aperture Radar (SAR)<br/> Radar Altimeter<br/> Other Microwave Instruments</p> <p><b>Payload Telemetry Subsystem</b><br/> Solid State recorder<br/> Compression Unit<br/> Formatting Unit<br/> Ciphering Unit<br/> Modulator Unit</p> <p><b>Ground Receiving Stations</b><br/> High Rate Demodulator<br/> Data Communication Gateway</p> <p><b>Mobile Satellite Communications Systems (Euteltracs)</b><br/> Vehicle messaging &amp; position reporting<br/> Mobile Data Integration Software</p> | <p>Alcatel 9901</p> |

| Description   | Product name   |
|---|----------------|
| <b>Defense &amp; Security</b>   |                |
| <i>Strategic Networks</i>   |                |
| <b>Military Infrastructure Switch</b><br>up to 8000 lines   | Alcatel 234    |
| <b>Nodal Switching System</b><br>Nodal Switching Unit (NSU) - up to 240 lines<br>Mobile NSU ; NSU compact ; mini NSU  | Alcatel 233    |
| <b>Military Network Management Centre</b>   | Alcatel 250    |
| <b>Digital Strategic Microwave Radio</b><br>8+2 or 34+2 Mbps (4.4-5 GHz) (7.1-8 GHz)  | Alcatel 202    |
| <b>Digital Troposcatter Radio</b><br>2x256 to 2x2048 kbps (4.4-5 GHz)   | Alcatel 203    |
| <b>Solid State Powers Amplifiers</b><br>500 W, 250 W, 70 W, 10 W (4.4-5 GHz)  | Alcatel 203 AP |
| <b>Military Message Handling System</b><br>X 400 - 88 compliant   | Alcatel 260    |
| <b>Containerized PMR</b><br>up to 35 mobile terminals   | Alcatel 280    |
| <b>C<sup>2</sup>I Voice Communication System</b>  | Alcatel 291    |
| <b>Secure Terminal for Voice and Data</b><br>End-to-end cyphered voice and data communications  | Alcatel 652    |
| <b>X.25 Packet Crypto Device</b>  | Alcatel 661    |
| <b>DART - Digital Adaptative Radio Transmission</b><br>Family of HF equipment (HF-receiver, transmitter,<br>DLT HF-transceiver, data modems, HF antenna tunners | Alcatel 510    |
| <b>Secure HF Radio Terminal</b><br>Portable   | Alcatel 801    |
| <i>Tactical Communications</i>  |                |
| <b>Integrated, Digital Area Communication System</b><br>acc. to Eurocom   | Alcatel 101    |
| <b>TAS 300 - Tactical Switches</b><br>Circuit, packet and messages switches   | Alcatel 130    |
| <b>TAS 350 - Tactical Switches</b><br>Circuit, packet and messages switches   | Alcatel 130    |
| <b>SCRA - Single Channel Radio Access System</b>  | Alcatel 111    |
| <b>AMAS - Alcatel Mobile Access System</b><br>Advanced Combat Net Radio Interface (CNRI)  | Alcatel 115    |
| <b>Radio Access Subsystem</b>   | Alcatel 116    |
| <b>Network Management System</b>  | Alcatel 150    |
| <b>Digital Tactical Microwave Radio System</b><br>256 to 2048 kbps<br>(610-960 MHz) (1.35-1.85 GHz) (4.4- 5 GHz)  | Alcatel 171    |
| <b>Digital Tactical Troposcatter System</b><br>256 to 2048 kbps (4.4- 5 GHz)  | Alcatel 179    |
| <b>Multirate Tactical Satellite Terminal</b><br>X, C & Ku bands   | Alcatel 732    |
| <b>Multirate Tactical Modem</b><br>9.6 to 2048 kbps   | Alcatel 740 MD |
| <b>Eurocom Digital Telephone</b>  | Alcatel 161    |
| <b>TDI 127 - Tactical PAD</b><br>Packet Assembler/Disassembler Data interface unit  | Alcatel 127    |
| <b>VHF Combat Net Radio</b>   | SEM 173/193    |
| <b>VHF Radio Handheld</b>   | SEM 52 SV      |



| Description  | Product name  |
|--|---|
| <p><b>CPCN - Command Post Communications Network</b><br/> <b>DART - Digital Adaptive Radio Transmission</b><br/> Family of HF equipment (HF-receiver, transmitter,<br/> DLT HF-transceiver, data modems, HF antenna tunners<br/> <b>RHINO Jammer/Interception System</b><br/> <b>Secure HF Radio Terminal</b><br/> Portable<br/> <b>Multipurpose Ground Surveillance &amp;<br/> Target Acquisition Radar System</b><br/> <b>Wide-Area Surveillance Radar for Land and Sea<br/> Area/Border Surveillance and Control System</b></p> | <p>Alcatel 510<br/><br/> Alcatel 520<br/> Alcatel 801<br/><br/> RATAC-S<br/> BOR-A 550<br/> BM 2000</p> |
| <b>Satellite Communications</b>  |   |
| <p>Strategic Stations<br/> Transportable Tactical Stations<br/> Mobile Naval Stations<br/> Strategic/Tactical Modems<br/> Gateways and Exchanges<br/> Network Management Components</p>  |   |
| <b>C<sup>3</sup>I Systems</b>  |   |
| <p><b>ALCIDE Alcatel C<sup>3</sup>I Platform and Generic<br/> Applications Modules</b></p>   |   |
| <p>Alcatel C<sup>3</sup>I Development and Execution Environment<br/> Software development Tools - Configuration Management</p>   | <p>Alcatel 300<br/> Alcatel 301</p>   |
| <b>Joint Staff</b>   |   |
| <p>Join Staff Information System</p>   | <p>Alcatel 330</p>  |
| <b>Army</b>  |   |
| <p>Army Tactical Information System<br/> Document Management and Processing System - AGARTHA</p>   | <p>Alcatel 340<br/> Alcatel 341</p>   |
| <b>Navy</b>  |   |
| <p>Photo-interpretation Station - DEIMOS</p>   | <p>Alcatel 350</p>  |
| <b>Air Force</b>   |   |
| <p>Aircraft Noise &amp; Tracks Monitoring System for Airports</p>  | <p>Alcatel 320</p>  |
| <p>Air Traffic Planning</p>  | <p>Alcatel 321</p>  |
| <p>Decision Aid for Interpretation of air Situation display - DAISY</p>  | <p>Alcatel 322</p>  |
| <p>Advanced Multi Sensor Tracker</p>   | <p>Alcatel 360</p>  |
| <p>Air Situation Display System</p>  | <p>Alcatel 361</p>  |
| <p>Planning &amp; Elaboration of General Air Space activities - PEGASE</p>   | <p>Alcatel 362</p>  |
| <p>Air Defense Center Environment Simulator - GENETICS</p>   | <p>Alcatel 363</p>  |
| <p>Mobile Air Defense Center - DIAMS</p>   | <p>Alcatel 364</p>  |
| <b>Security Forces</b>   |   |
| <p>Police Command Control, Communication System</p>  | <p>Alcatel 370</p>  |
| <p>Emergency Call Management System</p>  | <p>Alcatel 371</p>  |
| <p>Resources Management System</p>   | <p>Alcatel 372</p>  |
| <p>Automatic Vehicle Location System</p>   | <p>Alcatel 373</p>  |
| <p>Border Surveillance System - Radar version</p>  | <p>Alcatel 376/R</p>  |
| <p>Border Surveillance System - Optronic Sensor version</p>  | <p>Alcatel 376/O</p>  |
| <b>Access Security and Related Systems</b>   |   |
| <p>Integrated Site Security Safety Management System</p>   | <p>Alcatel 380</p>  |
| <p>Access Control and Alarms Management System (1780 RS)</p>   | <p>Alcatel 381</p>  |
| <p>Access Control and Alarms Management System (1530)</p>  | <p>Alcatel 382</p>  |

| Description  | Product name  |
|--|---|
| <b>Supervision Systems</b><br>Generic Safety/Security Supervision Architecture<br>Road Traffic Surveillance and Control - ALPHA  | Alcatel 390<br>Alcatel 392  |
| <b>Private Mobile Radio</b>  |   |
| <b>Conventional Infrastructure</b><br>Operator Desk<br>Telephone Interface<br>Isolated, Remote Controlled Repeater Station<br>80/150/400/450 MHz   | Alcatel 9320 DC<br>Alcatel 9320 PC<br>Alcatel 9320 GA   |
| <b>Conventional System</b><br>Fleet Management System for Fire Brigades  | SIGALE  |
| <b>Conventional and Trunk Terminals</b><br>80/150/400/450 MHz<br>Handheld<br>Mobile  | Alcatel 9220 HX<br>Alcatel 9220 MX  |
| <b>Trunk Network</b><br>DIGICOM 7 System - 150/400/450 MHz<br>(MPT 1327 Standard)  | Alcatel 9320 ST 7   |
| <b>Trunk Applications</b><br>Airport (Task Oriented Call)<br>Security (Network Monitoring System)<br>Geographic Information System<br>Radio Dispatcher Operator for Fleet Management   | Alcatel 9320 ST 7 TOC<br>Alcatel 9320 ST 7 NMS<br>Alcatel 9320 ST 7 GIS<br>Alcatel 9320 DX            |
| <b>Air Navigation Systems</b>  |   |
| <b>Instrument Landing System</b><br>Localizer (LOC)<br>Glide Slope (GS)<br>Marker (IM+MM+OM)<br>Far-Field Monitor (FFM)<br>Distance Measuring Equipment (DME-N, 100 W)   | Alcatel 410<br>Alcatel 411<br>Alcatel 412<br>Alcatel 413<br>Alcatel 414<br>Alcatel 415                |
| <b>Microwave Landing System</b><br>Azimuth (includes BAZ capability)<br>Elevation<br>Distance Measuring Equipment-Precision (DME-P, US Vers.)<br>Distance Measuring Equipment-Precision (DME-P)  | Alcatel 420<br>Alcatel 421<br>Alcatel 422<br>Alcatel 424<br>Alcatel 425                               |
| <b>En-Route Nav aids Products</b><br>VHF Omnidirectional Radio range beacon (VOR)<br>Doppler VOR beacon (DVOR)<br>TACTical Air Navigation beacon (TACAN)<br>Electronic TACAN Antenna (ELTA 200)<br>Distance Measuring Equipment (DME-N, 1kW)<br>Non-Directional Beacon (NDB)     | Alcatel 430<br>Alcatel 431<br>Alcatel 432<br>Alcatel 433<br>Alcatel 434<br>Alcatel 435<br>Alcatel 436 |
| <b>Peripheral Equipment</b><br>Remote Control Monitoring System (RCMS)<br>Local Communication Unit (LCU)<br>Remote Control Status Unit (RCSU)<br>Remote Maintenance and Monitoring System (RMMS)<br>Remote Maintenance Center (RMC)<br>Remote control and Status Indicator (RSI) | Alcatel 440<br>Alcatel 441<br>Alcatel 442<br>Alcatel 443<br>Alcatel 444<br>Alcatel 445<br>Alcatel 446 |

| Description   | Product name   |
|---|--|
| <b>Mobile Equipment</b><br>Mobile Tower<br>Mobile VOR<br>Mobile TACAN<br>Mobile NDB   | Alcatel 450<br>Alcatel 451<br>Alcatel 452<br>Alcatel 453<br>Alcatel 454  |
| <b>Integrated ATC and Airport Systems</b>   | INAS   |
| <b>Alcatel Integrated Control Environment</b><br>Controller Working Position<br>ALICE Software Modulés<br>Airport Surveillance and Control System | <b>ALICE</b><br><i>(CWP)</i><br><i>(ASM)</i><br><i>(ASCON)</i><br>Alcatel 460<br>Alcatel 461<br>Alcatel 462<br>Alcatel 466                 |
| <b>Surface Traffic Enhancement and Automation Support System</b>  | <b>STRLAMS</b>   |
| Radar Extractor and Tracking System<br>Mode-S Airport Ground System<br>System Control and Monitoring Position<br>STREAMS Software Modules         | <i>(RETS)</i><br><i>(MAGS)</i><br><i>(SCMP)</i><br><i>(SSM)</i><br>Alcatel 470<br>Alcatel 471<br>Alcatel 472<br>Alcatel 473<br>Alcatel 474 |
| <b>Satellite Navigation Augmentation Systems</b>  |  |
| <b>GPS Ground Augmentation Systems</b>  | Alcatel 480  |
| DGPS Ground Reference System  | <i>(GRS)</i><br>Alcatel 481  |
| DGPS Ground Monitor System  | <i>(GMS)</i><br>Alcatel 482  |

# Network Integration Telecom Software & Services

## Professional Services

- Consulting Services
- System Integration
- Support Services

## Operation Support Systems OSS

- OSS References Solutions
- OSS Solution Building Blocks

## Enhanced Network Service Solutions

- Data & Multimedia Solutions
- Voice Services Solutions
- Voice Processing Systems (Transvox)

| Description   | Product name   |
|---|--|
| <p><b>Professional Services</b></p> <p><b>Consulting Services</b></p> <ul style="list-style-type: none"> <li>Strategic Planning</li> <li>Business Process Engineering</li> <li>Networked Information Systems</li> <li>Network Security</li> <li>Information System Security</li> </ul> <p><b>System Integration</b></p> <ul style="list-style-type: none"> <li>Solution and architecture design</li> <li>Integration of Alcatel and 3rd party software packages</li> <li>Custom software development</li> <li>Overall system integration and validation</li> <li>Project management</li> </ul> <p><b>Support Services</b></p> <ul style="list-style-type: none"> <li>Training</li> <li>New Operator start-up assistance</li> <li>Facilities management</li> <li>Maintenance</li> <li>Migration from legacy systems</li> </ul> <p><b>Operation Support Systems OSS</b></p> <p><b>OSS References Solutions</b></p> <ul style="list-style-type: none"> <li>OSS Solutions for new entrant Telephone Operators</li> <li>OSS Solutions for Mobile Operators</li> <li>OSS Solutions for Transmission Capacity Providers</li> <li>OSS Solutions for CableTV/CablePhone Operators</li> <li>Management Solutions for Information Highways</li> <li>Integrated Network Management for Corporate Networks</li> <li>Advanced Network Operation Solutions</li> </ul> <p><b>OSS Solution Building Blocks</b></p> <ul style="list-style-type: none"> <li>Alma CCB, Customer Care &amp; Billing System (Telephony)</li> <li>PC based Customer Care &amp; Billing System</li> <li>Customer care &amp; Billing System (Cable Operator)</li> <li>Alma Subscriber</li> <li>Alma Directory</li> <li>Integrated Network Management (corporate networks)</li> <li>NM-Expert - Integrated Network Management Tool Kit</li> <li>Intelligent Fault Management</li> <li>Leased Line &amp; SDH Service Management System</li> <li>Alma RECO, Ticket Collector</li> <li>Alcatel Network Management Platform</li> </ul> <p>An extensive range of third party software products have been integrated into Alcatel Telecom Software and Services customer oriented OSS solutions. This includes:</p> <ul style="list-style-type: none"> <li>SS7 Probe Solutions</li> <li>Customer Care &amp; Billing for Mobile Network Operator</li> <li>Network Performance Management System</li> <li>Outside Plant and Inventory Management</li> <li>Workflow Management</li> <li>Trouble Ticketing</li> <li>Workforce Management</li> </ul> | <p>Alcatel 1343 CCB</p> <p>Alcatel 1343 PC</p> <p>Alcatel 1355 VD</p> <p>Alcatel 1334</p> <p>Alcatel 1336</p> <p>Alcatel 1354 UN</p> <p>Alcatel 1303 NME</p> <p>Alcatel 1303 IFM</p> <p>Alcatel 1355 LL</p> <p>Alcatel 1342</p> <p>ALMAP</p> |

| Description   | Product name  |
|---|---|
| <p><b>Enhanced Network Service Solutions</b></p> <p><b><i>Data &amp; Multimedia Solutions</i></b><br/> IT Communicating applications for large corporations<br/> Secure Integrated Messaging Solutions<br/> Internet/Intranet Solutions for Corporations<br/> &amp; Service Providers<br/> Networked Interactive Multimedia Service Solutions<br/> Powermail - X400 message handling system</p> <p><b><i>Voice Services Solutions</i></b><br/> Residential Voice Mail<br/> Mobile Communication Voice Mail<br/> Virtual Telephony<br/> Call Delivery<br/> Calling Card Services<br/> Televoting<br/> Interactive Voice Gateways</p> <p><b><i>Voice Processing Systems (Transvox)</i></b><br/> Interactive Voice Response Platform<br/> Global Voice Mail for Fixed Networks<br/> Global Voice Mail for Mobile Networks<br/> Intelligent Peripheral<br/> Digital Announcement Machine<br/> Enhanced Service Platform<br/> Short Message Service Center</p> | <p>Alcatel 1120</p> <p>Alcatel 4650<br/> Alcatel 8682 S<br/> Alcatel 8682 M<br/> Alcatel 1410<br/> Alcatel 1411<br/> Alcatel 1416<br/> Alcatel 8684</p> |



# Others

## Optoelectronic Components

- Terrestrial Discrete Components
- Terrestrial Integrated Modules
- Terrestrial Amplification
- Submarine Components
- Chips on Submount

## Fiberoptic Components

- Opto Passive Components
- LAN Components
- Test Equipment Modules

## Integrated Circuits

- ASIC's and ASSP's

## Transport Automation

- Electronic Route Setting & Control Systems
- Conventional Interlocking
- Supervisory Systems
- Automatic Train Control
- Devices and Protection Systems
- Fleet Management Systems

## Postal Automation

- Mail Handling Systems
- Transaction Systems



| Description   | Product name  |
|---|---|
| <b>Optoelectronic Components</b>  |   |
| <b>Terrestrial Discrete Components</b>  |   |
| <p>1 - Standard Digital Modules (LMO/DMO)<br/> Low Power 1.3 <math>\mu</math> FP Laser Module (DIL)<br/> Standard Power 1.3 <math>\mu</math> FP Laser Module (DIL/BFL)<br/> High Power 1.3 <math>\mu</math> DFB Laser Module (DIL)<br/> Standard Power 1.5 <math>\mu</math> DFB Laser Module (DIL/BFL)<br/> Low Power/low bit rate 1.3 <math>\mu</math> FP Laser Module (w/o TEC) (DIL)<br/> PIN-FET Detection Module (DIL)<br/> Pin-Preamp 2.5 Gbit/s Detection Module (BFL)<br/> APD Preamp 2.5 Gbit/s Detection Module (BFL)<br/> APD-Preamp 10 Gbit/s Detection Module (BFL)</p> <p>2 - Digital Modules with Optical Isolators (LMI/LMM)<br/> 1.3 <math>\mu</math> DFB 2.5 Gbit/s Laser Module (BFL)<br/> 1.5 <math>\mu</math> DFB 2.5 Gbit/s Laser Module (BFL)<br/> 1.5 <math>\mu</math> Laser Module with Integrated External Modulator (BFL/SMA)<br/> 1.5 <math>\mu</math> Laser Module with Integrated External Modulator (BFL)<br/> C.W. Digital Laser Module for External Modulation (BFL)</p> <p>3 - Analog Modules (LMP/DMP)<br/> 1.5 <math>\mu</math> C.W. Analog Laser Module for External Modulation (BFL)<br/> 1.3 <math>\mu</math> Analog Laser Module Direct Modulation (BFL)<br/> PIN Analog Detection Module (DIL)<br/> PIN Analog Detection Module (coax)</p> | <p>Alcatel 1913 LMO<br/> Alcatel 1933 LMO<br/> Alcatel 1943 LMO<br/> Alcatel 1915 LMO<br/> Alcatel 1903 LMO<br/> Alcatel 1911 DMO<br/> Alcatel 1912 DMO<br/> Alcatel 1922 DMO<br/> Alcatel 1925 DMO</p> <p>Alcatel 1913 LMI<br/> Alcatel 1915 LMI<br/> Alcatel 1915 LMM<br/> Alcatel 1916 LMM<br/> Alcatel 1905 LMI</p> <p>Alcatel 1905 LMP<br/> Alcatel 1933 LMP<br/> Alcatel 1903 DMP<br/> Alcatel 1913 DMP</p>                         |
| <b>Terrestrial Integrated Modules</b>   |   |
| <p>1 - SDH/SONET Modules (SDH)<br/> OC-3/STM-1 Module<br/> OC-12/STM-4 Module<br/> OC-48/STM-16 Module</p> <p>2 - ATM Modules (ATM)<br/> 155 Mb/s, SC duplex, 1x9 pin transceiver Module<br/> 155 Mb/s, SC duplex, 2x9 pin transceiver Module<br/> 622 Mb/s, SC duplex, 1x9 pin transceiver Module<br/> 622 Mb/s, SC duplex, 2x9 pin transceiver Module</p> <p>3 - Coaxial Modules (LMC/DMC)<br/> Window cap coaxial laser module<br/> Lens cap coaxial laser module<br/> Pigtailed coaxial laser module<br/> Connectorized coaxial laser module<br/> Lens cap coaxial detector module<br/> Pigtailed coaxial detector module<br/> Connectorized coaxial detector module<br/> Lens cap PIN-Preamp coaxial module<br/> Pigtailed PIN-Preamp coaxial module<br/> Lens cap InGaAs APD coaxial module<br/> Pigtailed InGaAs APD coaxial module</p> <p>4 - Transmit-Receive-Device Modules (TRD)<br/> 1 Fiber Bidirectional Module</p>   | <p>Alcatel 1911 SDH<br/> Alcatel 1914 SDH<br/> Alcatel 1916 SDH</p> <p>Alcatel 1901 ATM<br/> Alcatel 1911 ATM<br/> Alcatel 1904 ATM<br/> Alcatel 1914 ATM</p> <p>Alcatel 1901 LMC<br/> Alcatel 1911 LMC<br/> Alcatel 1951 LMC<br/> Alcatel 1981 LMC<br/> Alcatel 1911 DMC<br/> Alcatel 1951 DMC<br/> Alcatel 1981 DMC<br/> Alcatel 1912 DMC<br/> Alcatel 1952 DMC<br/> Alcatel 1914 DMC<br/> Alcatel 1954 DMC</p> <p>Alcatel 1911 TRD</p> |
| <b>Terrestrial Amplification</b>  |   |
| <p>1 - Optical Amplifier Modules (OFA)<br/> Digital Booster Module<br/> Analog Booster Module<br/> Digital Booster Module<br/> Digital Preamplifier Module<br/> In Line Amplifier Module<br/> Digital Flat Gain Booster Module<br/> Digital Flat Gain Booster Module<br/> In-line Flat Gain Amplifier Module<br/> In-line, low noise, high gain, Flat-Gain Amplifier Module</p> <p>2 - Pump Laser Modules (PLM)<br/> Up to 140 mW 1.48 <math>\mu</math> Terrestrial Pump Laser Module<br/> 1.48 <math>\mu</math>m Terrestrial Pump Laser Module with isolator</p>   | <p>Alcatel 1901 OFA<br/> Alcatel 1911 OFA<br/> Alcatel 1902 OFA<br/> Alcatel 1903 OFA<br/> Alcatel 1904 OFA<br/> Alcatel 1921 OFA<br/> Alcatel 1922 OFA<br/> Alcatel 1924 OFA<br/> Alcatel 1925 OFA</p> <p>Alcatel 1948 PLM<br/> Alcatel 1948 PLI</p>   |

| Description  | Product name   |
|--|--|
| <b>Submarine Components</b>  |  |
| 1 - GIGA 5 Products (SMG)<br>1.48 $\mu$ Submarine Pump laser module - 40 mW<br>5 Gbit/s terminal laser module<br>1.48 $\mu$ m Submarine Pump laser module - 60 mW  | Alcatel 1932 SMG<br>Alcatel 1911 SMG<br>Alcatel 1933 SMG   |
| <b>Chips on Submount</b>   |  |
| 1 - Emitting Chips (LC)<br>1.3 FP $\leq$ 622 Mbit/s BRS laser<br>1.3 DFB $\leq$ 622 Mbit/s BRS laser<br>1.3 DFB 2.5 Gbit/s BRS laser<br>1.48 FP Pump laser<br>1.5 FP $\leq$ 622 Mbit/s BRS laser<br>1.5 DFB $\leq$ 622 Mbit/s BRS laser<br>1.5 DFB 2.5 Gbit/s BRS laser<br>Monolithically integrated 1.5 $\mu$ DFB laser<br>and EA external modulator<br>1.3 FP Laser Array  | Alcatel 1931 LC<br>Alcatel 1932 LC<br>Alcatel 1934 LC<br>Alcatel 1942 LC<br>Alcatel 1951 LC<br>Alcatel 1952 LC<br>Alcatel 1954 LC<br>Alcatel 1955 LC<br><br>Alcatel 1931 LA  |
| 2 - Receiving Chips (DC)<br>InGaAs Monitoring PIN<br>$\leq$ 622 Mbit/s InGaAs signal PIN<br>Analog signal InGaAs PIN<br>2.5 Gbps signal InGaAs PIN<br>10 Gbit/s signal InGaAs PIN<br>$\leq$ 622 Mbit/s signal InGaAs APD<br>2.5 Gbit/s signal InGaAs APD<br>$\leq$ 622 Mbit/s PIN detector array   | Alcatel 1932 DC<br>Alcatel 1911 DC<br>Alcatel 1913 DC<br>Alcatel 1914 DC<br>Alcatel 1915 DC<br>Alcatel 1921 DC<br>Alcatel 1924 DC<br>Alcatel 1911 DA   |
| <b>Fiberoptic Components</b>   |  |
| <b>Opto Passive Components</b>   |  |
| 1 - Splitters<br>Power Splitter Components ; single window<br>Power Splitter Components ; double window<br>Power Splitter Cassette ; single window<br>Power Splitter Cassette ; double window<br>Power Splitter Module (rack mount package) ; single window<br>Power Splitter Module (rack mount package) ; double window<br>2 - Wavelength Division Multiplexer<br>Wavelength Division Multiplexer ; standard isolation<br>Wavelength Division Multiplexer ; high isolation<br>WDM high isolation ; rack mount package<br>3 - Optical Switches<br>Optical switch in rack mount package<br>4 - Substrates<br>Al <sub>2</sub> O <sub>3</sub> - based thin film electronic circuit substrate<br>AlN - based laser diode and photodiode submount<br>5 - Jumper Cable<br>Connectorized cables and fibres | Alcatel 1901 PSP<br>Alcatel 1902 PSP<br>Alcatel 1901 PSC<br>Alcatel 1902 PSC<br>Alcatel 1901 PSM<br>Alcatel 1902 PSM<br><br>Alcatel 1911 WMP<br>Alcatel 1912 WMP<br>Alcatel 1912 WMM<br><br>Alcatel 1901 RSM<br><br>Alcatel 1931 CES<br>Alcatel 1932 CES<br><br>Alcatel 1900 OCA |
| <b>LAN Components</b>  |  |
| 1 - LAN Transceiver<br>Taken ring minihub<br>Ethernet minihub<br>Fast Ethernet minihub<br>Power supply unit for LAN transceiver<br>2 - Passive LAN components<br>Patch panels ; 19 inch drawer<br>Optical jumper cable   | Alcatel 1901 LAN<br>Alcatel 1902 LAN<br>Alcatel 1904 LAN<br>Alcatel 1910 LAN<br><br>Alcatel 1920 LAN<br>Alcatel 1930 LAN   |
| <b>Test Equipment Modules</b>  |  |
| 1 - Transmitters<br>Hybrid transmitter<br>2 - Receivers<br>Hybrid receiver<br>OEK 100 receiver   | Alcatel 1931 LMT<br><br>Alcatel 1931 DMT<br>Alcatel 1924 DMT   |

| Description  | Product name |
|--|--------------|
| <p><b>Integrated Circuits</b></p> <p><b>ASIC's and ASSP's</b></p> <ul style="list-style-type: none"><li>Semiconductor technologies and services</li><li>Short-haul POTS chipset</li><li>ISDN chipset</li><li>ADSL chipset</li><li>Power Line Modem chipset</li><li>ARM</li></ul> |              |

| Description   | Product name |
|---|--------------|
| <b>Transport Automation</b>   |              |
| <b>Electronic Route Setting &amp; Control Systems</b>   |              |
| ELEKTRA System<br>Electronic Interlocking Systems using software diversity, including remote control and management operation features                                | Alcatel 6000 |
| ELEKTRA-COMPACT<br>Electronic Interlocking System with full ELEKTRA System functionality for small and/or low density lines stations                                  | Alcatel 6001 |
| ELEKTRA SBB<br>Swiss version of ELEKTRA System  | Alcatel 6002 |
| ELEKTRA MAV<br>Hungarian version of ELEKTRA System  | Alcatel 6003 |
| ESTW L90<br>Electronic Interlocking System with high degree of availability and safety, two out three selection logic and structured hardware, colour monitor display | Alcatel 6010 |
| ENCE L90<br>Spanish version of ESTW L90   | Alcatel 6011 |
| F L90<br>Remote control of a conventional by an electronic interlocking   | Alcatel 6012 |
| ESTW L90 P<br>Luxemburg version of ESTW L90   | Alcatel 6013 |
| ESTW L90 P<br>Polish version of ESTW L90  | Alcatel 6014 |
| ESTW L90 P<br>Portugese version of ESTW L90   | Alcatel 6015 |
| ESTW L90 N<br>Electronic Interlocking System for urban transit  | Alcatel 6016 |
| INTERSIG<br>Electronic Interlocking System for medium and small stations and urban transit  | Alcatel 6020 |
| INTERSIG L905-E<br>Electronic Interlocking System for medium and small stations, Spanish version  | Alcatel 6021 |
| SIG L90<br>Supervisory and Control System for low density lines   | Alcatel 6024 |
| TELETRAIN 1600 A<br>Computer based Remote Control System with event controlled information transfer   | Alcatel 6030 |
| COMMAND 900<br>Non-vital electronic Remote Control System with relay interfaces. Cyclic interrogation or event controlled transmission                                | Alcatel 6032 |
| CTC L900<br>Centralized Traffic Control System with timetable editing   | Alcatel 6033 |
| BO L900<br>Operation Control Desk for the Centralized Traffic Control System L900   | Alcatel 6034 |
| FCS/Field Code System<br>Landlines or radio control   | Alcatel 6035 |
| TMF 16K<br>Vital Voice Frequency Multiplex Transmission System  | Alcatel 6041 |
| A.S.T.C 2000<br>Electronic remote control system with cyclic interrogation and relay interface  | Alcatel 6042 |
| RIES 900<br>Diagnostic and Monitoring System for ESTW L90 for maintenance support   | Alcatel 6047 |
| <b>Conventional Interlocking</b>  |              |
| SpDr L-A2<br>Geographical Pushbutton Relay Interlocking System for medium and large stations  | Alcatel 6073 |
| TRICON E<br>Geographical Relay Interlocking System for medium and large stations with heavy traffic   | Alcatel 6074 |

| Description   | Product name |
|---|--------------|
| SpDr L77<br>Geographical Pushbutton Relay Interlocking<br>System for Mass Transit Systems   | Alcatel 6076 |
| ÜTA<br>Rerouting System<br>Cross-over system on the line between two stations   | Alcatel 6085 |
| ECB L90<br>Electronic Block System  | Alcatel 6086 |
| EB L2000<br>Electronic Block System for high capacity lines   | Alcatel 6087 |
| CONSOLE<br>Mosaic-type illuminated track diagram  | Alcatel 6100 |
| <b>Supervisory Systems</b>  |              |
| BLZ<br>Computer-aided Operations and Control Center   | Alcatel 6142 |
| TMS<br>Traffic Management System (CTC)  | Alcatel 6143 |
| FIA<br>Passenger Information Display System   | Alcatel 6144 |
| RZÜ<br>Computerized Train Supervisory System with<br>supra-regional information and command system  | Alcatel 6146 |
| RZÜ-STATISTICS<br>Statistics of RZÜ-Data  | Alcatel 6147 |
| SELNET<br>LAN based Automatic Train Regulation (ATR) and Traffic<br>Management System utilizing computerized dispatch technology  | Alcatel 6148 |
| Train 900<br>Train Describer System (export version of the ZNL 800)   | Alcatel 6150 |
| ZNL 800<br>Train Describer System   | Alcatel 6151 |
| ZLL 800<br>Train Routing System with graphic monitoring   | Alcatel 6152 |
| IFB<br>Interactive Time-table Construction Tool   | Alcatel 6153 |
| VLZ<br>Computerized Traffic Control and Supervision Center  | Alcatel 6154 |
| BLS<br>Operational Control System for urban transit   | Alcatel 6155 |
| MULTILOG<br>Electronic Event Recording System   | Alcatel 6157 |
| OBC<br>On-board Enforcement Unit  | Alcatel 6158 |
| <b>Automatic Train Control</b>  |              |
| LZB 80<br>Computer-controlled Continuous Automatic<br>Train Control System  | Alcatel 6171 |
| INDUSI 160R<br>Automated Train Protection System  | Alcatel 6172 |
| LZB L72<br>Computer-controlled Continuous Automatic<br>Train Control System for high density traffic  | Alcatel 6174 |
| LZB L90<br>Computer-controlled Continuous Automatic Train<br>Control System for urban transit   | Alcatel 6300 |
| Euroloop<br>Modular Automatic Train Protection System   | Alcatel 6175 |
| SELTRAC<br>Transmission based Continuous Automatic Train Control<br>System for urban transit applications utilizing the moving<br>block principle                                 | Alcatel 6180 |
| LDCS (Low Density Control System)<br>Computer-controlled Train Control System for Automatic<br>People Mover and urban transit applications utilizing the<br>fixed block principle | Alcatel 6183 |

| Description   | Product name |
|---|--------------|
| <b>Devices and Protection Systems</b>   |              |
| AZE - A2<br>Electronic Axle Counter System in SpDrL-A2<br>equipment practice                    | Alcatel 6220 |
| AZE - A3<br>Electronic Axle Counter System in ELEKTRA<br>equipment practice                     | Alcatel 6221 |
| AzL70 - 30<br>Axle Counter System   | Alcatel 6225 |
| AzL70 - 30 S<br>Axle Counter System - voice frequency band                                      | Alcatel 6226 |
| Az L90-M<br>Microprocessor-based multi-section Axle Counter System                              | Alcatel 6227 |
| Transistor Track Relay in SpDrL-A2<br>equipment practice  | Alcatel 6230 |
| Transistor Track Relay in ELEKTRA equipment practice  | Alcatel 6231 |
| AKA L90   | Alcatel 6235 |
| Mobile Warning System for workgang protection   |              |
| SAS (ROWA)<br>Mobile Warning System for workgang protection                                     | Alcatel 6237 |
| EKSA<br>Relay-Controlled Protection System for<br>Level Crossing with or without barriers       | Alcatel 6239 |
| Electronic Low Frequency Track Circuit  | Alcatel 6242 |
| Electronic High Frequency Track Circuit   | Alcatel 6243 |
| RS-L<br>Wheel Detector  | Alcatel 6244 |
| Electric drive for level crossing (barriers)  | Alcatel 6245 |
| Barrier Motors for level crossing   | Alcatel 6246 |
| Barrier Motors gravity fall based, for level crossing   | Alcatel 6247 |
| S.B.A.<br>Electronic-Controlled Protection System<br>for level crossing                         | Alcatel 6250 |
| S.B.E.<br>Electronic-Controlled Protection System<br>related to a Station Interlocking          | Alcatel 6251 |
| EHW L700H<br>Electrohydraulic Point Machine with external lock                                  | Alcatel 6254 |
| EHW L710H<br>Electrohydraulic Point Machine with internal lock                                  | Alcatel 6255 |
| System for detection of fallen objects onto the track   | Alcatel 6260 |
| EHW Standard Type<br>Stroke length 220 mm (for various voltages)                                | Alcatel 6261 |
| EHW Short-Stroke Type<br>Especially for moveable frog (for various voltages)                    | Alcatel 6262 |
| EHW Long-Stroke Type<br>Stroke length 240 mm especially for hook lock<br>(for various voltages) | Alcatel 6263 |
| EHW for High Speed Points of heavy type<br>(various types and voltages)                         | Alcatel 6264 |
| EHW for 16 2/3 Hz (various types and voltages)  | Alcatel 6265 |
| PSS ELEKTRA<br>Power Supply System for all types of Interlocking<br>Systems                     | Alcatel 6270 |
| Electromechanic Point Machine 220 V   | Alcatel 6271 |
| <b>Fleet Management Systems</b>   |              |
| NAVCOM<br>GPS with dead reckoning   | Alcatel 6400 |
| Automatic Emergency Call System<br>NAVCOM 3000 with GSM radio                                   | Alcatel 6401 |
| On-board Computer for information display   | Alcatel 6402 |
| RDS Decoder and Receiver for DGPS correction  | Alcatel 6403 |
| Central Computing Station for wide fleet management<br>application                              | Alcatel 6404 |
| GPS Reference Station RS 2000   | Alcatel 6405 |

| Description                      | Product name |
|----------------------------------|--------------|
| <b>Postal Automation</b>         |              |
| <b>Mail Handling Systems</b>     |              |
| Mail Preparation Systems         |              |
| Facer                            | Alcatel 8111 |
| Facer/Canceller                  | Alcatel 8112 |
| Culler/Facer/Canceller           | Alcatel 8113 |
| Compact Systems                  |              |
| Stand-alone Coding Desk          | Alcatel 8121 |
| Coding Desk Suite                | Alcatel 8122 |
| Compact Coding System            | Alcatel 8123 |
| High Capacity Systems            |              |
| Video System                     | Alcatel 8131 |
| OCR System                       | Alcatel 8132 |
| OCR/Video System                 | Alcatel 8133 |
| Final Sorting System             | Alcatel 8134 |
| OVCS System                      | Alcatel 8141 |
| On-line/Off-line Video System    | Alcatel 8142 |
| Carrier Sequence Bar Code Sorter | Alcatel 8143 |
| Flat Sorting Systems             |              |
| Flat Sorter                      | Alcatel 8151 |
| Information Systems              |              |
| Office Monitoring System         | Alcatel 8161 |
| Central Monitoring System        | Alcatel 8162 |
| Ancillary Systems                |              |
| Bundle Conveyors                 | Alcatel 8166 |
| <b>Transactional Systems</b>     |              |
| Transactional Automation Systems |              |
| MTA Cashlink                     | Alcatel 8170 |
| MTA Phonelink                    | Alcatel 8180 |
| Electronic Voting Systems        |              |
| Compvote                         | Alcatel 8190 |





