

Empowered by Innovation

**NEC**

*Aspila*  
**TOPAZ**  
Intelligent Hybrid System

The affordable, expandable solution for  
expanding small and medium businesses



# Aspila Topaz - Smart Solutions, Simply Affordable

Aspila Topaz is a cutting-edge Digital Key Telephone System that accommodates immediate and emerging business requirements of the small and medium enterprises (SMEs), small offices and home offices (SOHOs). The scalable intelligent telecommunication tool is designed to effectively and cost-efficiently meet the increasing needs of growing SMEs / SOHOs.

## System Connection Diagram



## High-performance Design



### Scalability

Aspila Topaz allows for expansion from the minimum of 3 trunks / lines and 8 extensions to the maximum of 27 trunks / lines and 72 extensions without compromising efficiency as your company grows.



### Full Hybrid Ports

Aspila Topaz's Full Hybrid Ports allow seamless integration of single line telephones, proprietary key telephones, modems, facsimiles, answering machines and more. You have the choice to select the type of terminals that best fits your needs.



### Digital Architecture

Aspila Topaz's Non-Blocking System uses high performance digital switching architecture that allows limitless extension to extension and intercom calls simultaneously. It also supports Euro-ISDN BRI (Integrated Services Digital Network Basic Rate Interface)\* that allows for the integration of voice and data via telephone networks.



### Voice over Internet Protocol (VoIP)

Aspila Topaz's VoIP\* feature is ready to take advantage of the converging world between voice and data communication by integrating and transmitting voice, fax and data over packet-switched IP-based networks.

Aspila Topaz supports both commonly used standards in IP communications, namely H323 and Session Initiation Protocol (SIP)\*\*.

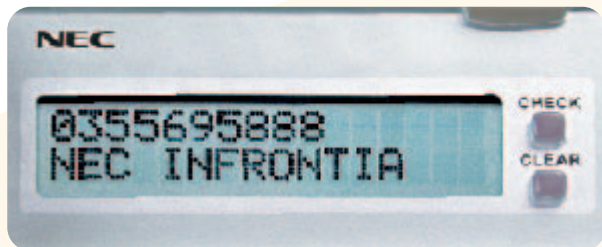
\* VoIP features require optional items.

\*\* Compatibility of SIP is subject to the carrier network subscribed.

## Expert Call Handling

### Built-In Caller-ID

Caller-ID feature enables your proprietary display key telephone or Caller-ID single line telephone to show the caller's number and/or name before you answer an incoming call. You can review the historical records of up to 20 received / missed calls for each proprietary display key telephone.



### Least Cost Routing (LCR) / Automatic Route Selection (ARS)

If you engage more than one telephone service provider, Aspila Topaz will automatically utilize pre-programmed LCR / ARS table and type of operation to identify the most competitive call rates when routing outgoing calls.

### Call Forwarding

Call Forwarding feature enables incoming calls to be redirected automatically to another extension or an external number (mobile phone, home and etc.) when you are not available to answer the calls. You may select the type of call forwarding condition (Immediate / when Busy / when No-Answer), designated number and activate it easily from your extension.

In addition, you may choose to redirect an incoming call manually to a pre-assigned extension by simply pressing a Function Key without answering the call.

### Group Listening

Group Listening function allows you to broadcast your conversations via built-in speaker on the proprietary display key telephone. This enables your surrounding parties to listen to the conversation.



### Hotline

This function allows you to call a pre-assigned extension or external number by just lifting the handset without dialing any numbers. This is an ideal feature for lobby phones, security guard houses, parking attendants, and etc.

### Day / Night Mode

Aspila Topaz provides up to 8 system modes which can be switched either automatically or manually. Each mode can be configured to redirect calls towards specified extensions or groups that match your requirements effectively.

### Multiple Ring Tones

Aspila Topaz key telephone comes with 13 ring tones which can be selected to personalize the ring tone of your extension and distinguish external calls from internal calls.

### Virtual Extension

Virtual Extension feature enables one proprietary key telephone to have multiple extension numbers and it may be shared by multiple users. Each Virtual Extension number is distinguishable by assigning a different ring tone.

### Conference

Conference function allows you to setup a teleconference between internal and/or external parties. You may establish a multiple party teleconference up to total of 32 participants simultaneously in multiple groups with a maximum of 8 participants per group.

There are two methods of organizing a teleconference; you may call and invite each participant or you may request all participants to dial a given designated Conference Number to join the teleconference\*.

*\*Optional item (DSPDB) is required.*

### Uniform Call Distribution (UCD)

Uniform Call Distribution (UCD) feature handles incoming calls efficiently by distributing them to extension groups uniformly. Users may turn on "Break Mode" to avoid incoming calls temporarily and redirect the incoming calls to another available extension automatically. In the event that all extensions are busy, the system has an option to announce a queuing message\* to the callers while the calls are being queued.

*\*Optional item (DSPDB) is required.*

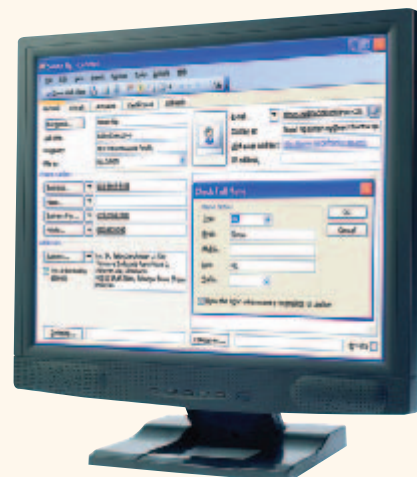


### Computer Telephony Integration (CTI)

Aspila Topaz's Computer Telephony Integration (CTI) readiness allows you to connect your phone system to your personal computer (PC) via the Local Area Network (LAN) by using Telephony Application Program Interface (TAPI) and enables the connected PC as a CTI terminal.

With the CTI capabilities of Aspila Topaz, you will be able to view your callers contact details before you answer the call.

*\*CTI features require optional items.*



## Enriched Hospitality

### Hotel / Motel Features\*

Aspila Topaz has the features to meet the hospitality services needs of a small hotel or motel. Some of the innovative features are Check-in/Check-out, Wake-up Call, Message Waiting, Do Not Disturb, Single Digit Access, Toll Restriction Class Change of each room, Room-to-Room Call Restriction, Room Status Indication, Room Status Output and Room Monitoring.

\*Software License is required to activate these features.



### Music On Hold (MOH)

MOH (Music On Hold) sends music to calls on hold to inform your caller that their call has been put on hold and not forgotten. You may use one of the 3 built-in music or record your own music or announcement\* to have a more personal touch for your callers. Alternatively, you may also connect the system to an external music device such as a radio or CD player as the source of MOH.\*\*

\*Optional item (DSPDB) is required.

\*\*Optional item (2PGDU) is required.

Disclaimer: In accordance with copyright law, a license may be required if radio, television broadcasts or music other than material not in the public domain are transmitted through the Music On Hold (MOH) feature of telecommunication systems. NEC Infrontia Asia Pacific hereby disclaims any liability arising out of the failure to obtain such a license.

## Cost Management & Security

### Toll Restriction

Toll Restriction feature prohibits specified extensions from accessing unauthorized numbers which have been pre-programmed into the restriction table. A total of 15 restriction classes can be assigned to each extension.

### Walking Toll Restriction

Walking Toll Restriction feature allows specific users to override Toll Restriction Class temporarily by entering their Walking Toll Restriction password. A maximum of 500 Passwords may be registered for multiple users.

### Extension Lock (Dial Block)

Extension Lock (Dial Block) feature prevents unauthorized personnel from making calls from your extension while you are away from your desk. You may switch on or off this feature by entering a security code.

### Long Conversation Alarm / Cut-off

Long Conversation Alarm feature provides callers a beeping reminder tone periodically during a long continuous telephone conversation. The Long Conversation Cut-off feature is used to disconnect external calls forcefully after the pre-programmed time limit. Both of these features enable you to manage your communication cost effectively.

### Station Message Detail Recording (SMDR)\*

SMDR feature enables the system to record the information of incoming, outgoing and transferred calls such as date, time, dialed number and call duration. These call information may be output to printers and/or personal computers to monitor telephone usage and user's productivity as well as manage communication cost.

\* Optional item (EXIFU) is required.

## Interactive Voice Assistance

### Voice Response System (VRS)\*

Voice Response System (VRS) provides various voice facilities namely Automated Attendant, Voice Announcement, Greetings, and others to increase your productivity and efficiency.

Aspila Topaz provides multiple levels of Automated Attendant\*\* that guides callers to reach the desired extension or group without going through a telephone operator. You may personalize the message by recording it from your extension. This feature will improve the efficiency of handling incoming calls and overall customer service.

\*Optional item (DSPDB) is required.

\*\*Not more than 48 Greeting Messages

### Voice Mail\*

Aspila Topaz has an option to add on the Voice Mail features which allow up to approximately 10 hours of total recording time and handle up to 8 accesses simultaneously. In addition, Aspila Topaz's Voice Mail provides comprehensive features such as Conversation Recording and Message Notification.

### Message Notification

When an external caller leave a voice message to your extension, Aspila Topaz automatically places a call to your pre-assigned number (another extension, mobile phone, home, etc) and sends a notification informing you to retrieve the new message in your Voice Mail Box.

### Conversation Recording

You may record and store your telephone conversations with external callers into your Voice Mail Box and playback the recorded conversations anytime.

\*Optional Items (DSPDB and CF-B1) are required.

## Easy Maintenance

### Web Based Configuration Manager (Administrator/User)

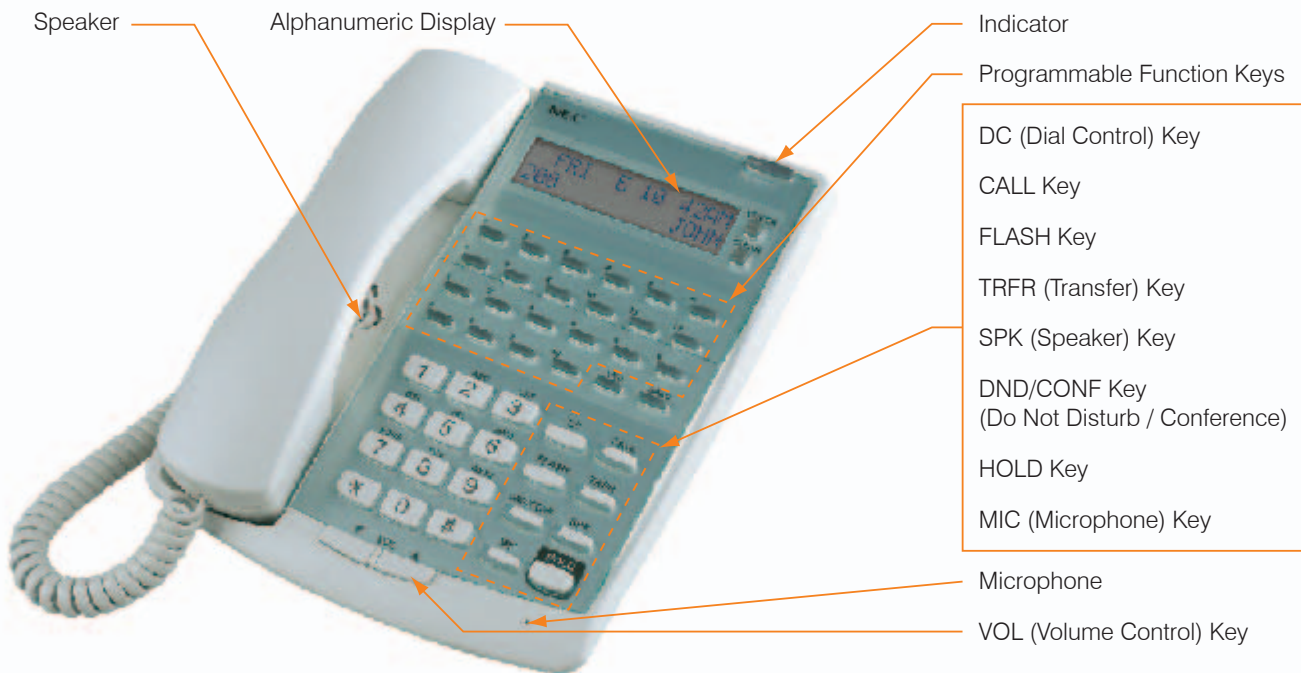
Administration of the system has never been easier with the intuitive Graphical User Interface (GUI). Aspila Topaz comes equipped with 2 types of Web Based System Configuration Manager. One for the administrator and the other for extension users.

This web based software enables administrators and extension users to manage settings from virtually anywhere with a network connection. The user-friendly GUI allows users to configure or change the settings easily without any experience of system programming.



## Terminals

### Features & Functions



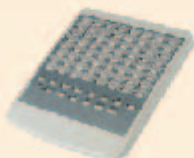
Functionality				
	16 Button Standard Key Telephone	16 Button Display Key Telephone	22 Button Standard Key Telephone	22 Button Display Key Telephone
Alphanumeric Display (Lines x Character)	No	Yes (2 x 16)	No	Yes (2 x 16)
Additional PRG Keys	10	10	10	10
Programmable Keys	6	6	12	12
Handsfree	No (Talk Back)	Yes	No (Talk Back)	Yes
Clear / Check Key	No	Yes	No	Yes
Compatible with DLS / DSS Console	No	Yes	No	Yes
Wall Mount Kit	Yes (Built-In)	Yes (Built-In)	Yes (Built-In)	Yes (Built-In)
Adjustable Legs	Yes (Built-In)	Yes (Built-In)	Yes (Built-In)	Yes (Built-In)

Note: BLF (Busy Lamp Field) on the Additional Programmable Keys is not available on standard type keyphones (12TD / 6TD).

## Terminals Accessories



24 Button Direct Line Console  
\*Connects direct to Display Type Key Telephone



64 Button Direct Station Selection Console  
\*Connects direct to KSU extension port



AT-40 Single Line Telephone



AT-35 Caller-ID Single Line Telephone

## Features List

- |   |  |
|---|--|
| <input type="checkbox"/> Abbreviated Dialing  | <input type="checkbox"/> Line Preference   |
| <input type="checkbox"/> Account Codes  | <input type="checkbox"/> Long Conversation Alarm Cutoff  |
| <input type="checkbox"/> Alarm  | <input type="checkbox"/> Loop Keys   |
| <input type="checkbox"/> Alphanumeric Display   | <input type="checkbox"/> Meet Me   |
| <input type="checkbox"/> Attendant Call Queuing   | <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/> Conference                                |
| <input type="checkbox"/> Automatic Route Selection (F-Route)                                  | <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/> Paging                                    |
| <input type="checkbox"/> Background Music   | <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/> Paging Transfer                           |
| * <input type="checkbox"/> Barge In   | <input type="checkbox"/> Memo Dial   |
| <input type="checkbox"/> Call Forwarding  | <input type="checkbox"/> Message Waiting   |
| <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/> Fixed            | <input type="checkbox"/> Microphone Cutoff   |
| <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/> Off-Premise      | <input type="checkbox"/> Multiple Directory Numbers / Call Coverage  |
| <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/> Abbreviated Dial | <input type="checkbox"/> Multiple Ring Tone  |
| <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/> Follow Me        | <input type="checkbox"/> Music on Hold   |
| <input type="checkbox"/> Call Forward for Centrex   | <input type="checkbox"/> Name Storing  |
| <input type="checkbox"/> Call Forwarding / Do Not Disturb Override                            | <input type="checkbox"/> Night Service   |
| <input type="checkbox"/> Call Redirect  | <input type="checkbox"/> Off Hook Signaling  |
| <input type="checkbox"/> Call Timer   | * <input type="checkbox"/> Paging, External  |
| <input type="checkbox"/> Call Waiting / Camp On   | <input type="checkbox"/> Paging, Internal  |
| <input type="checkbox"/> Callback   | <input type="checkbox"/> Park Hold   |
| <input type="checkbox"/> Caller ID  | <input type="checkbox"/> PBX Compatibility   |
| <input type="checkbox"/> Central Office Calls, Answering                                      | <input type="checkbox"/> Prime Line Selection  |
| <input type="checkbox"/> Central Office Calls, Placing  | <input type="checkbox"/> Private Line  |
| <input type="checkbox"/> Class of Service   | <input type="checkbox"/> Programmable Function Keys  |
| <input type="checkbox"/> Conference (Max 8 conference calls x 4 groups)                       | <input type="checkbox"/> Pulse to Tone Conversion  |
| <input type="checkbox"/> Conference, Voice Call / Privacy Release                             | <input type="checkbox"/> Repeat Dial   |
| <input type="checkbox"/> Continued Dialing  | <input type="checkbox"/> Remote Conference   |
| <input type="checkbox"/> Conversation Recording   | <input type="checkbox"/> Remote Maintenance  |
| <input type="checkbox"/> Day / Night Mode   | <input type="checkbox"/> Ring Groups   |
| <input type="checkbox"/> Department Calling   | <input type="checkbox"/> Ringdown Extension, Internal / External   |
| <input type="checkbox"/> Department Step Calling  | <input type="checkbox"/> Room Monitor  |
| <input type="checkbox"/> Dial Number Preview  | <input type="checkbox"/> Save Number Dialed  |
| <input type="checkbox"/> Dial Pad Confirmation Tone   | <input type="checkbox"/> Secretary Call (Buzzer)   |
| <input type="checkbox"/> Dial Tone Detection  | <input type="checkbox"/> Secretary Call Pickup   |
| <input type="checkbox"/> Direct Inward Line (DIL)   | <input type="checkbox"/> Selectable Display Messaging  |
| <input type="checkbox"/> Direct Inward System Access (DISA)                                   | <input type="checkbox"/> Serial Call   |
| * <input type="checkbox"/> Direct Station Selection   | * <input type="checkbox"/> Station Message Detail Recording  |
| <input type="checkbox"/> <input type="checkbox"/> (DSS) Console                               | <input type="checkbox"/> Tandem Trunking (Unsupervised Conference)   |
| <input type="checkbox"/> Directed Call Pickup   | <input type="checkbox"/> Time and Date   |
| <input type="checkbox"/> Do Not Disturb   | <input type="checkbox"/> Toll Restriction  |
| * <input type="checkbox"/> Door Box   | <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/> Dial Block                                |
| <input type="checkbox"/> Extension Lock   | <input type="checkbox"/> <input type="checkbox"/> - <input type="checkbox"/> Override                                  |
| <input type="checkbox"/> Fax Machine Compatibility  | <input type="checkbox"/> Transfer  |
| <input type="checkbox"/> Flash  | <input type="checkbox"/> Trunk Group Routing   |
| <input type="checkbox"/> Flexible System Numbering  | <input type="checkbox"/> Trunk Groups  |
| <input type="checkbox"/> Forced Trunk Disconnect  | <input type="checkbox"/> Trunk Queuing / Camp On   |
| <input type="checkbox"/> Group Call Pickup  | <input type="checkbox"/> Uniform Call Distribution (UCD)   |
| <input type="checkbox"/> Group Listening  | <input type="checkbox"/> User Programming  |
| <input type="checkbox"/> Handsfree and Monitor  | <input type="checkbox"/> Virtue Extensions   |
| <input type="checkbox"/> Handsfree Answerback / Forced Intercom Ringing                       | * <input type="checkbox"/> Voice Mail  |
| * <input type="checkbox"/> Headset Operation  | * <input type="checkbox"/> Voice Response System (VRS)   |
| <input type="checkbox"/> Hold   | <input type="checkbox"/> Volume Controls   |
| <input type="checkbox"/> Hotline  | <input type="checkbox"/> Warning Tone For Long Conversation  |
| <input type="checkbox"/> Intercom   | <input type="checkbox"/> Web Based Configuration Manager   |
| <input type="checkbox"/> Last Number Redial   |  |
| <input type="checkbox"/> Least Cost Routing (LCR)   | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> *Optional Features |

## Specifications

Item	Main KSU	Main KSU + 1 Exp. KSU	Main KSU + 2 Exp. KSU
Analog Trunk	<input type="checkbox"/> 9	<input type="checkbox"/> 18	<input type="checkbox"/> 27
Key Telephone	(24)	(48)	(72)
Single Line Telephone	(24) } 24 (Total)	(48) } 48 (Total)	(72) } 72 (Total)
DSS Console	(3) }	(6) }	(9) }
Virtual Extension	<input type="checkbox"/> 50	<input type="checkbox"/> 50	<input type="checkbox"/> 50
Euro-ISDN (BRI)	<input type="checkbox"/> 8 (16ch)	<input type="checkbox"/> 16 (32ch)	<input type="checkbox"/> 24 (48ch)
DLS Console	<input type="checkbox"/> 24	<input type="checkbox"/> 48	<input type="checkbox"/> 72
Doorphone Box	<input type="checkbox"/> 2	<input type="checkbox"/> 4	<input type="checkbox"/> 6
External Paging Output	(2) }	(4) }	(6) }
External MOH Input	(2) } 2 (Total)	(2) } 4 (Total)	(2) } 6 (Total)
BGM Input	(2) }	(2) }	(2) }
Power Failure Transfer	<input type="checkbox"/> 3	<input type="checkbox"/> 6	<input type="checkbox"/> 9
External Backup Battery	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

## Mechanical Specifications

Item	Width (mm)	Depth (mm)	Height (mm)	Weight (kg)
924M/924ME KSU	360	90	275	2.8 fully equipped
OPBOX	130	86	279	1.1 fully equipped
Backup Battery Box	384	99	182	5.2 fully equipped

## Electrical Specifications

Input Voltage (Frequency)	100 / 240 VAC (50 / 60 Hz)
Power Consumption	120W

## Environmental Specifications

KSU, PCBs and Key Telephones	Temperature <input type="checkbox"/> <input type="checkbox"/> ~ +40 degree (32 ~ 104 degree F)
	Humidity <input type="checkbox"/> : <input type="checkbox"/> 0 ~ 90% (non-condensing)
Doorphone Box	Temperature <input type="checkbox"/> <input type="checkbox"/> 20 ~ +60 degree (-4 ~ 140 degree F)
	Humidity <input type="checkbox"/> : <input type="checkbox"/> 20 ~ 80% (non-condensing)

## Accessories List

Item	Description	Item	Description
<b>MAIN EQUIPMENT c/w 3 COs, 8 EXTs</b>		<b>ISDN INTERFACE CARDS</b>	
924M KSU	Main KSU	2BRIU-S1	ISDN BRI (4 channels)*
924ME KSU	Expansion KSU	4BRIU-S1	ISDN BRI (8 channels)*
<b>ANALOG TRUNK / EXTENSION CARDS</b>		<b>VoIP GATEWAY INTERFACE CARDS</b>	
308E-A1	3 Trunks + 8 Hybrid Extension Interface	4VOIPU-S1	4 VoIP Media Gateway*
008E-A1	8 Hybrid Extension Interface	4VOIPDB-S1	4 VoIP Media Gateway Daughter Board*
<b>KEY TELEPHONE SETS AND CONSOLES</b>		<b>OPTIONAL ACCESSORIES</b>	
6TD TEL (WH)	16 Programmable Keys, Standard Type Key Telephone	EXIFU-A1	Expansion Connectors, Station Message Detail Recording Interface, Local Area Network Port
6TXD TEL (WH)	16 Programmable Keys, 2 lines Display Type Key Telephone	EXIFU-B1	Station Message Detail Recording Interface
12TD TEL (WH)	22 Programmable Keys, Standard Type Key Telephone	2PGDU-A1	2 doorphone Interface, 2 Door Unlock Relay, 2 Audio Input/Output Interface (ExMOH/BGM/2 External Paging)
12TXD TEL (WH)	22 Programmable Keys, 2 lines Display Type Key Telephone	DSPDB-B1	Digital Signal Processing, Voice Response System / Automated Attendance Interface Card w/o Compact Flash Card
64D DSS (WH)	64 Keys DSS Console	CF-A0	4 channels Voice Response System / Automated Attendance Compact Flash Card
24DL DLS (WH)	24 Keys DLS Console	CF-A1	16 channels Voice Response System / Automated Attendance Compact Flash Card
<b>SINGLE LINE TELEPHONES</b>		CF-B1	16 channels Voice Response System / Automated Attendance with 8 channels Voice Mail Compact Flash Card
AT35	Caller-ID Single Line Telephone	2OPBOX	Additional Box for Optional Interface Cards (2 Slots)
AT40	Single Line Telephone without Message Waiting Lamp	DX2E-32/NX7E Battery Box	External Backup Battery Box
AT45*	Single Line Telephone with Lamp	DX.E ABB. CARD SET	Stand type Abbreviated Dial Number Card Set
		DX4NA DOORPHONE	Doorphone
		DESIGNATION LABEL	Plain white, for Key Telephone Sets

\*Require 2OPBOX

\*Aspila Topaz does not support MW Lamp indication on SLT.  
 The Intercom Dial Tone will be changed when message waiting is set.

### Guaranteed NEC INFRONTIA Quality

When you buy Aspila Topaz products, you also buy part of the NEC INFRONTIA legacy that began in 1918. As a worldwide manufacturer of telecommunications and electronic systems, we produce all of our products with performance and reliability in mind.

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