

# IBS 8379 User Manual for installation

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Approval Date: 11/04/2018  
Approver: Guntzburger Philippe

State:Draft

OneDoc site: Hardware  
Document Type: Installation\_guide

Product: 8379

Description: As user documentation is not available yet, this document gathers information's to present the IBS 8379 products, and their configuration

Keywords: DECT; IBS

## History :

Edition	Date	Modification	Reason
00	05.04.2018	creation	
01	09.04.2018	One Doc edition	
02	11.04.2018	One Doc edition	Update after revue with SW
03	04.05.2018	One Doc edition Title: remove R&D Replace customer by installer Remove 4.2.1 Antenna configuration Remove all mention to TBR6, antenna selection, reset button. Remove mention for lab test to keep IBS supply floating Remove chapter 4.7.2.1 related to R&D tests, and replace by the dip switch configuration table	Remove R&D information, and keep what is intended to be used in customer doc.

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## 1. Terminology and Abbreviations

AE	Auxiliary Equipment
CE	Conducted Emission
CS	Conducted Susceptibility/Immunity
EFT/B	Fast Transients / Bursts
EMC	Electro Magnetic Compatibility
EMI	Electro Magnetic interference
ESD	Electrostatic discharge
EUT	Equipment Under Test
IBS	Intelligent Base Station
MFS	Magnetic field strength
N.A.	Not applicable
PABX	Private Automatic Branch Exchange
PBA	Printed Board Assembly
PoE	Power Over Ethernet
RE	Radiated Emission
RS	Radiated Susceptibility/Immunity

## 2. Introduction

As user documentation is not available yet, this document gathers information's to present the product, and his configuration. Official documentation for installation will be released with the Product Commercial Release.

### 3. Client information

<b>Name and address of the applicant:</b>	<b>ALE</b> <b>32 avenue Kléber</b> <b>92700 Colombes</b> <b>France</b>	<b>INTERNATIONAL</b>
<b>Name of contact person:</b>	Patrick Hauptmann +33 3 90 67 52 12	
<b>Name and address of manufacturer:</b>	ALE 32 avenue Kléber 92700 Colombes France	INTERNATIONAL
<b>Name and address of EMS:</b>	ACCTON TECHNOLOGY CORPORATION INTERNATIONAL HQ No 1 Creation 3rd RD Science-Based Industrial Park 300077 HSINCHU CITY TAIWAN R.O.C	
<b>Name and address of the factory:</b>	JOY TECHNOLOGY (SHENZHEN) CO., LTD. TongFuyu Ind., Shangpai, Shangwu,Aiqun Rd., Shiyan Town, Shenzhen 518108 China Tel:86-755-33816888	
<b>Product type:</b>	<b>Intelligent Base Station DECT</b>	
<b>Trademarks:</b>	Alcatel-Lucent	
<b>Models:</b>	<b>8379 DECT IBS INTEGRATED ANTENNAS</b> <b>8379 DECT IBS FOR EXTERNAL ANTENNAS</b> <b>8379 DECT IBS OUTDOOR EXTERNAL ANTENNAS</b>	
<b>Accessories:</b>	External antennas Main power supply	

## 4. Product description

IBS 8379 is an evolution of IBS 4070 made necessary by the obsolescence of:

- ❑ the RF transceiver
- ❑ the power supply controller.

IBS 8379 is 100% compatible with the existing IBS 4070 (i.e. installer can add an IBS 8379 to an existing installation or replace an IBS 4070 with an IBS 8379 without any modification of the installation)

### 4.1 Electrical description

Main changes in IBS 8379 are:

- ❑ The DE19RF19Z transceiver from DSPG Group replaces the Philips based RF module of IBS4070.
- ❑ A mono board PCB architecture is used since this new radio uses much less components. As a drawback, we have no more place to equip RBS components on the PCB.  
⇒ Only IBS is considered by this product, RBS will remain a variant of 4070 design.
- ❑ A small CPLD is used to adapt our ASIC BBIBS to the new radio interface of DSPG chip.
- ❑ The power supply controller is modified but keeps the same external behavior (no input-output isolation, same alarms, ...). IBS 8379 is supplied:
  - By PBX thanks to UA Links (remote supply)
  - By external Main adapter. (see table at the end of this chapter)
- ❑ The PCB supports two antenna designs:
  - one with a printed antenna + wire antenna,
  - and one with the same SMA than current IBS 4070 allowing the customer to use external antenna.

SMA solution also remains a backup solution in case the printed antenna is not working as expected.

- ❑ Country/Region and Frequency range management:
  - Thanks to the new DSPG chipset, all frequency range are covered with the same design. There is no more need for Country/Region specific variants, IBS 8379 has worldwide coverage.
  - **With a minor software evolution, the PABX will indicate to IBS 8379 which regional setting it shall use. However, a default region is being configured in IBS Renewal for compatibility with existing systems.**
  - To support old system without changing the PABX SW release, Installer is able to force manually the region thanks to an internal HW switch (4xDIL).

**DECT Europe spec:**

DECT (Europe)	8379 DECT IBS INTEGRATED ANTENNAS	8379 DECT IBS FOR EXTERNAL ANTENNAS	8379 DECT IBS OUTDOOR EXTERNAL ANTENNAS
Technology:		DECT	
Frequency band:		1880 – 1900MHz	
Lowest transmit/receive frequency/MHz:		1881,792 MHz	
Highest transmit/receive frequency/MHz:		1897,344 MHz	
Kind of modulation:		GFSK	
Test channel low:		9	
Test channel middle:		5	
Test channel high:		0	
Maximum number of timeslots:	12	12	12
Maximum number of active timeslots:	6	6	6
Nominal peak output power:		24 dBm/250mW	
Averaged output power:		10,4mW/slot	

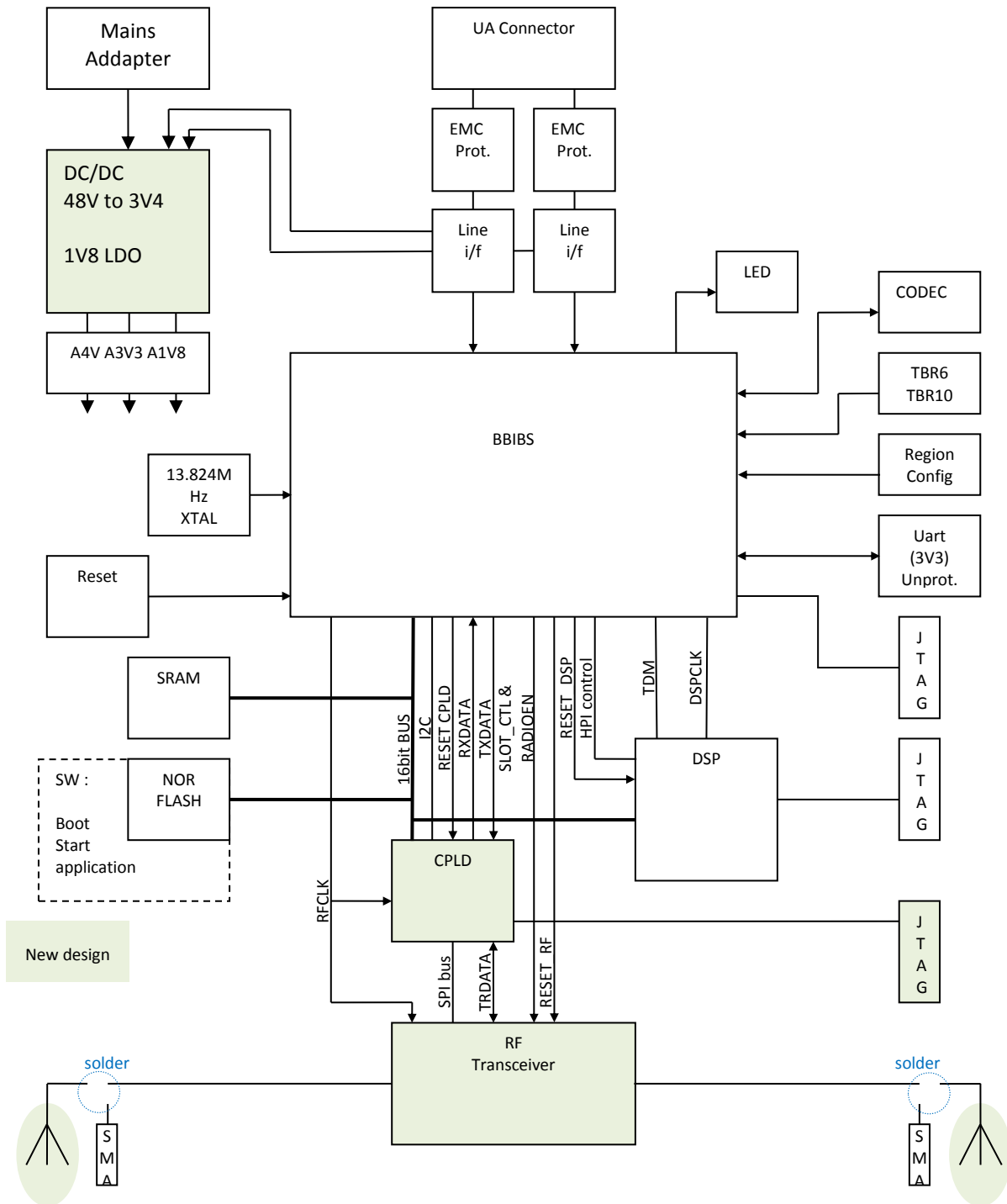
**DECT US spec:**

For US configuration, the nominal peak output power is lowered to fulfill FCC regulation. Therefore the output peak power is tuned below 20.88 dBm.

**WA-13B48RG-BAAA (level VI) External Power supply spec:**

Item	Performance	Remarks
Alcatel Part Number	<b>3MG27066AABA</b>	
Output Voltage	48Vdc	
Output Range	± 5%	
Full Load	0.27A	
Min. Load	0.0A	
Max. Ripple	Voltage 300mVp-p	@Ta=25°C
Hold Up Time	10mS Min	Full Load & 110Vac/60Hz Input @Ta=25°C
Turn on Time	3 S Max	Full Load & 115Vac/60Hz Input @Ta=25°C
Overshoot	10% Max	Power on @90~264Vac/47~63Hz
Line regulation	± 1 %	
Load regulation	± 5 %	

4.1.1 Overall Block diagram



## 4.2 PCB/PBA description

The PCB has a global thickness of 1.6mm / FR4 material / controlled impedances: 50 Ω +/- 10%.

There are 3 PBA variants:

1. Indoor variant with SMA connectors. (to use external antennas)
2. Outdoor variant with SMA connectors (= indoor SMA PBA variant + tropicalized).
3. Indoor variant with integrated antenna:  
The 2 antennas use soldered wires or ribbons which extend from the PCB.  
A small modification of the indoor box is required to allow the mounting of these antenna

From electrical point of view, 1) & 2) are identical PBA (same components equipment). But reference changes because of topicalization.

PBA	8379 DECT IBS INTEGRATED ANTENNAS	8379 DECT IBS FOR EXTERNAL ANTENNAS	8379 DECT IBS OUTDOOR EXTERNAL ANTENNAS
<b>Equipment</b>	Equipped w/o SMA	Equipped w/ SMA	
<b>Antennas connection</b>	Soldered	SMA connector	
<b>Antennas</b>	Wired antenna (internal)	not delivered	external antenna 2dBi embedded
<b>External antenna compatibility</b>	NO	Yes	Yes
<b>Tropicalisation</b>	No		Yes

## 4.3 Mechanical description

The new board fits in the same boxes as the former product indoor & outdoor.

The PCB has the same size as IBS 4070

IBS Box modifications:

- Minor mechanical changes of the indoor box are required for compatibility with the integrated antenna. (remove some internal ribs)
- Minor change in outdoor box on the Adaptation sheet : top-left hole fixation move

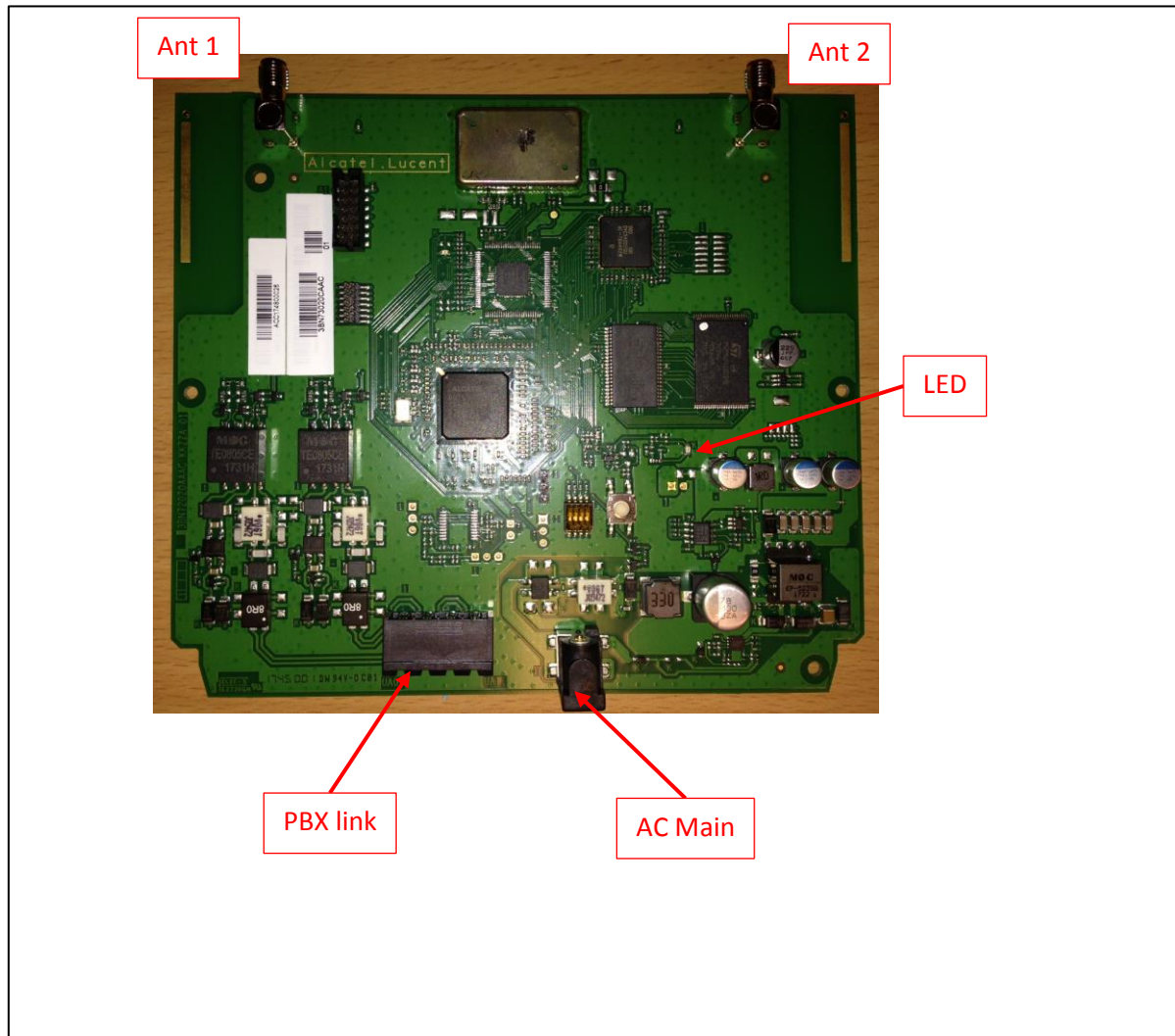
From external point of view, the new IBS 8379 has exactly the same look & feel than the previous IBS 4070.

We have total compatibility of the mounting of the new IBS to replace 4070 IBS.



## 4.4 Internal interfaces

Board connections are shown here:

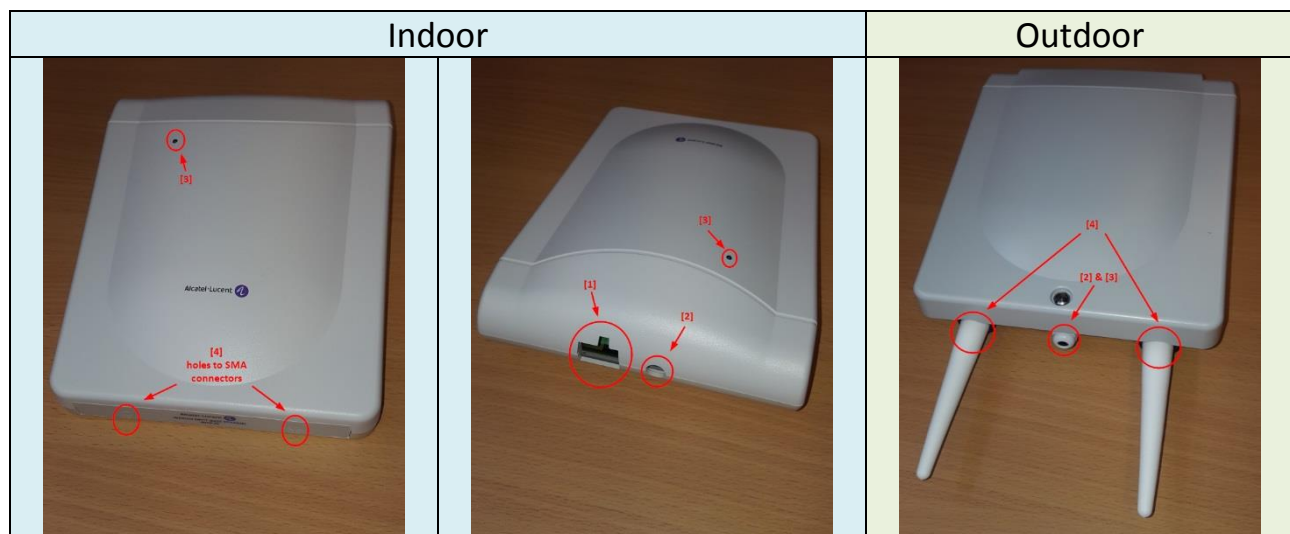


- The reset is done remotely by the PBX:
  - SW reset = PBX message
  - HW reset = PBX cut the UA power link

## 4.5 External interfaces

Product Interface one can access are:

- |                           |                                     |
|---------------------------|-------------------------------------|
| 1. UA0 & UA1              | 4x 5.08mm connector for UA cable.   |
| 2. External Main adapter. | 2.0mm Jack Plug                     |
| 3. LED                    | provides visual indication          |
| 4. Antennas               | connected to SMA mounted on the PCB |



## 4.6 Product Environment

**IBS 8379 shall be plugged as replacement of former IBS generation.**

The configuration supports up to 2 UA link between THE PABX and the IBS.

Each UA link provides 256kBits full duplex data rate:

- ❑ 1x64kbit signalization
- ❑ 6x32kbit ADPCM

ADPCM/PCM transcoding is done in the PABX.

### 4.6.1 Supplies

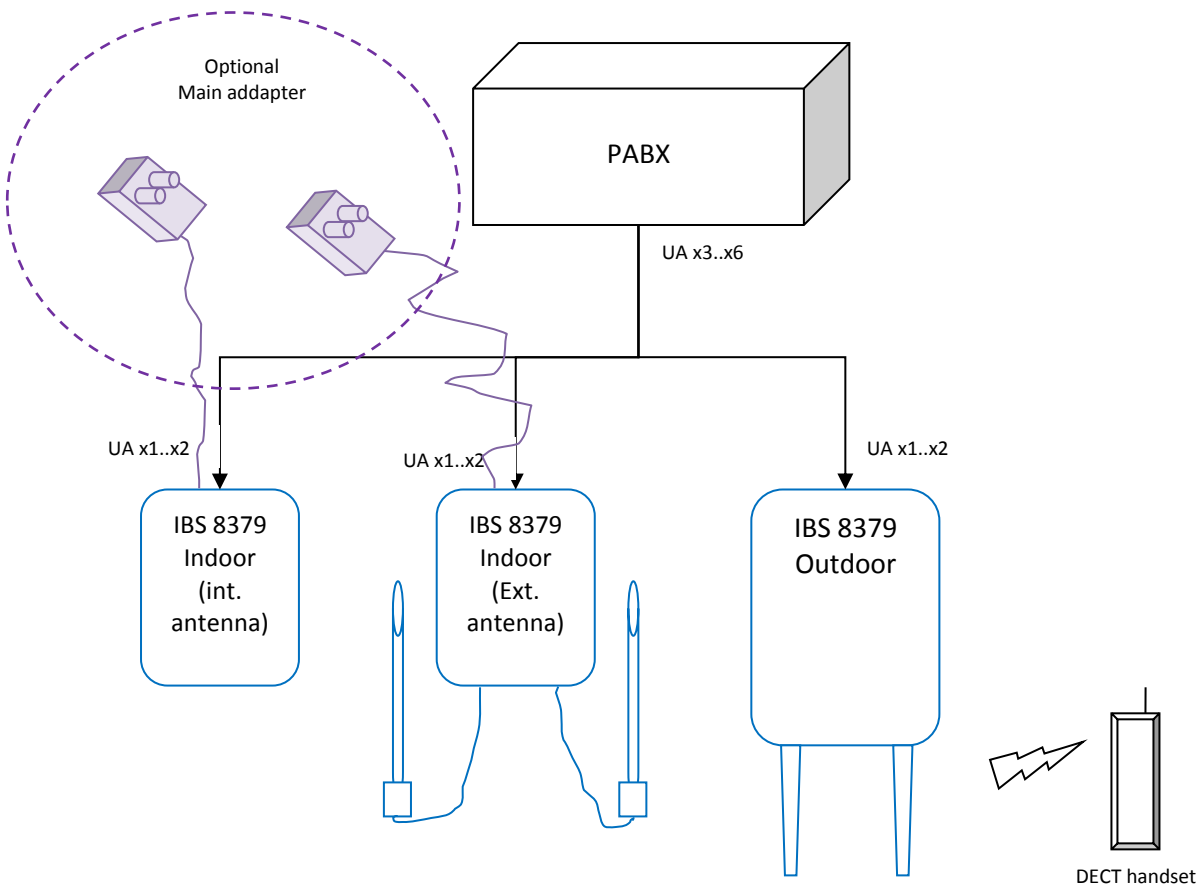
The IBS 8379 is powered like former base station generation. The supply can be:

- Remote supply for all base stations variant
- AC main adapter for indoor product only.

**Note 1:**

*Even if we plug the AC Main, PBX link must be plugged to enable the base station.*

**4.6.2 Overall environment diagram:**



## 4.7 Product configuration

### 4.7.1 Nominal configuration

In normal use, the configuration of the IBS is the default one (out of the box).

The Base station starts without activating RF, and wait PBX connection through the UA link.

**Important:**

- The end user has no way to change the frequency or output power of the base station.
- Only the installer can manage the RF Frequency Band and/or the output power. Either in the PBX configuration, protected by password, either on the HW dip switch inside the box and not available as external interface.
- Installer must ensure the configuration he chooses, complies with local regulation. And installer must ensure to avoid un-authorized configuration setting.

**Several cases are possible:**

- ➔ IBS 8379 is connected to new PBX release (i.e. OXE R12.2 or above):
  - At initialization, the PBX will send the frequency band to the IBS.
  - IBS will configure his RF chip for DECT in the correct frequency band
- ➔ IBS 8379 is connected to older PBX release:
  - At initialization, the PBX does not give the frequency band info.
  - IBS will send back her current frequency band (ex. European)
  - The PBX checks the IBS region
    - If IBS region is compatible with PBX configured region then all is OK, base station is operating
    - Else IBS region is not compatible with the PBX configured region Then the PBX resets the IBS
  - IBS restarts, and again receive the PBX init message without frequency band info.
  - This time IBS will send back a status with the next frequency band in the list (ex. China)
  - This process will loop over the 4 frequency bands (Europe – China – Latam - US) until the PBX and the IBS region are compatible. Then the base station is working.
- ➔ Installer wants to force in manual mode the IBS region:
  - Installer opens the base station shell, select the relevant value
  - When connected to the system, the IBS will start with the region set.
  - When the OXE checks the region compatibility, he resets the base station if not compatible.
  - It is then under installer responsibility to configure correctly the base station.

The SW knows the IBS variant (indoor, indoor with ext. antenna, outdoor) from ALE part number stored in EEPROM during manufacturing tests.

Therefore the output power can be reduced automatically for indoor product according to the next table. But the outdoor product has one case involving manual setting (represented in blue). This case is used when the installer will connect 8dBi antenna on outdoor product in US frequency band.

	IBS 8379 IO INDOOR INTEGRATED ANTENNAS	IBS 8379 IO INDOOR FOR EXTERNAL ANTENNAS	IBS 8379 EO OUTDOOR WITH EXT. ANTENNAS	DIP switch 4
Region	3BN73020BA..	3BN73020CA..	3BN73020DA..	RFBD-4
Europe	23dBm	<b>23dBm</b>	23dBm	1
China	23dBm	<b>23dBm</b>	23dBm	1
Latam	23dBm	<b>23dBm</b>	23dBm	1
USA	19dBm	<b>13dBm</b>	19dBm	1
USA	13dBm	<b>13dBm</b>	<b>13dBm</b>	<b>0</b>

*Note 1: The Bold value in the table represent the physical configuration of IBS Base station with external antenna of 8dBi gain*

*Note 2: Even if not mandatory, region like Europe can be configured by installer with the output power reduced by 6dB. This could help if there are too much reflection in a given location, or if several Base stations are in a close location to increase density.*

#### 4.7.1.1 Compatibility table

Compatibility table is shown hereafter:

- Standard use in Bold
- Reduced power in grey

##### 4.7.1.1.1 8379 DECT IBS INTEGRATED ANTENNAS: 3BN77020BA

Product	Antenna	Antenna ref	Antenna Gain	Other countries			US Only		
				Europe	China	Latam		USA	
8379 DECT IBS INTEGRATED ANTENNAS 3BN77020BA	Integrated	None, wire + printed PCB 2dB omnidirectional	2dBi		<b>23dBm</b>	<b>23dBm</b>	<b>23dBm</b>		<b>19dBm</b>
					<i>17dBm</i>	<i>17dBm</i>	<i>17dBm</i>		<i>13dBm</i>

##### 4.7.1.1.2 8379 DECT IBS FOR EXTERNAL ANTENNAS: 3BN77020CA

Product	Antenna	Antenna ref	Antenna Gain	Other countries			US Only		
				Europe	China	Latam		USA	
8379 DECT IBS FOR EXTERNAL ANTENNAS 3BN77020CA	External	MA430X12 7.5dB omnidirectional	8dBi		<b>23dBm</b>	<b>23dBm</b>	<b>23dBm</b>		<b>13dBm</b>
					<i>17dBm</i>	<i>17dBm</i>	<i>17dBm</i>		<i>13dBm</i>
	External	1319.19.0004 LHCP circular righthand	8dBi		<b>23dBm</b>	<b>23dBm</b>	<b>23dBm</b>		<b>13dBm</b>
					<i>17dBm</i>	<i>17dBm</i>	<i>17dBm</i>		<i>13dBm</i>
	External	1319.19.0005 RHCP circular righthand	8dBi		<b>23dBm</b>	<b>23dBm</b>	<b>23dBm</b>		<b>13dBm</b>
					<i>17dBm</i>	<i>17dBm</i>	<i>17dBm</i>		<i>13dBm</i>

4.7.1.1.3 8379 DECT IBS OUTDOOR EXTERNAL ANTENNAS: 3BN77020DA

Product	Antenna	Antenna ref	Antenna Gain	Other countries			US Only		
				Europe	China	Latam		USA	
8379 DECT IBS OUTDOOR EXTERNAL ANTENNAS 3BN77020DA	External	MA300X05 2dB omnidirectional	2dBi		23dBm	23dBm	23dBm		19dBm
					17dBm	17dBm	17dBm		13dBm
	External	MA430X12 7.5dB omnidirectional	8dBi		23dBm	23dBm	23dBm		Unauthorized (1)
					17dBm	17dBm	17dBm		<u>13dBm (2)</u>
	External	1319.19.0004 LHCP circular righthand	8dBi		23dBm	23dBm	23dBm		Unauthorized (1)
					17dBm	17dBm	17dBm		<u>13dBm (2)</u>
	External	1319.19.0005 RHCP circular righthand	8dBi		23dBm	23dBm	23dBm		Unauthorized (1)
					17dBm	17dBm	17dBm		<u>13dBm (2)</u>

Note 1: Unauthorized configuration. Installer needs to take care to never use this setting. Installer must follow the expert configuration documentations.

Note 2: Underlined in yellow, requested configuration. Installer must follow the expert configuration documentations.

#### 4.7.2 Manual configuration

Nominal case does not require to do manual configuration. The SW can configure dynamically the 8379 DECT Base Station.

End user has not access to Manual configuration.

Installer must follow the expert configuration documentations, to configure correctly and homogenously the whole system.



## 5. Submitted Items lists

### 5.1 Test Items

Ref	Commercial
3BN77020BA	8379 DECT IBS INTEGRATED ANTENNAS
3BN77020CA	8379 DECT IBS FOR EXTERNAL ANTENNAS
3BN77020DA	8379 DECT IBS OUTDOOR EXTERNAL ANTENNAS

### 5.2 Accessories

#### 5.2.1 Power adapter:

ref	Commercial
3MG2706AABA WA-13B48RG-BAAA (level VI)	Power Adapter with movable plug  Input:90-264V,47~63Hz Output:48V/0.27A

#### 5.2.2 Embedded antennas:

##### Antenna integrated on the IBS 8379 indoor: 3BN77020BA

ref	Commercial
	None, wire + printed PCB 2dB omnidirectional  Gain 2dBi

##### Antenna embedded on the IBS 8379 outdoor: 3BN77020DA

ref	Commercial
1AF10050AAAA	<p>MA300X05 2dB omnidirectional</p> <p><b>TECHNICAL DATA :</b></p> <p><b>Product code</b> MA300X05  <b>Frequency range</b> 1880 to 1930 MHz  <b>Nominal impedance</b> 50 ohms  <b>VSWR</b> ≤ 1.5  <b>Polarization</b> linear, vertical (antenna installed vertical)  <b>Gain</b> 2 dBi  <b>Radiation in horizontal plane</b> omnidirectional  <b>Radiation in vertical plane</b> beamwidth (E plane) at -3 dB : = 70°  <b>Maximum power</b> 5 watts  <b>Connector</b> SMA male at the end of a RG316 coaxial cable (overall length : = 360 mm)  <b>Height</b> 116 mm above mounting surface  <b>Shroud diameter</b> 19.2 mm the base  <b>Shroud material / color</b> UV-resistant white plastic, UL94HB  <b>Weight</b> = 70 g  <b>Temperature range</b> -33°C to +55°C  <b>Environment</b> ETS 300 019-2-3, specification T3.3  <b>Wind speed</b> 160 km/h</p>

### 5.2.3 External antennas:

ref	Commercial	
3BD52212AA	MA430X12 7.5dB omnidirectional <a href="https://amphenol-antennas.com/">https://amphenol-antennas.com/</a>	<ul style="list-style-type: none"> <li>▪ Type MA430X12</li> <li>▪ Frequency (MHz) 1880-1900</li> <li>▪ VSWR &lt;1.5 : 1</li> <li>▪ Gain (dBi) 8</li> <li>▪ Polarisation Vertical</li> <li>▪ E Plane Beamwidth (-3 dB Points) 17°</li> <li>▪ Maximum Power (Watts) 10</li> <li>▪ Termination SMA socket</li> <li>▪ Dimensions mm 73 - Ø 1.5</li> <li>▪ Weight (kg) 0.235</li> <li>▪ Windloading @45 m/s (N) 26 at 160 km/h</li> <li>▪ Colour Grey</li> <li>▪ Shroud Glass fibre</li> <li>▪ Brackets / Mounting Plastic mounting bracket</li> <li>▪ Packing Details</li> <li>▪ Packing Individual plastic bag</li> <li>▪ Dimensions mm 73</li> <li>▪ Weight (kg) 0.4</li> </ul>
3BD52205AA	SENCITY® Spot-S indoor Antenna <a href="https://ecatalog.hubersuhner.com">https://ecatalog.hubersuhner.com</a>	<ul style="list-style-type: none"> <li>▪ 1319.19.0005</li> <li>▪ item n° 22650451</li> <li>▪ SENCITY SpotS planar indoor DECT antenna</li> <li>▪ Polarisation: RHCP circular righthand</li> <li>▪ Working range: 1850 to 1990 MHz</li> <li>▪ Half power beamwidth: 70° / 70° (vert./hor.); 8 dBi Gain</li> <li>▪ Wall mounting socket included</li> </ul>
3BD52206AA	SENCITY® Spot-S indoor Antenna <a href="https://ecatalog.hubersuhner.com">https://ecatalog.hubersuhner.com</a>	<ul style="list-style-type: none"> <li>▪ 1319.19.0004</li> <li>▪ item n° 22650455</li> <li>▪ SENCITY SpotS planar indoor DECT antenna</li> <li>▪ Polarisation: LHCP circular lefthand</li> <li>▪ Working range: 1850 to 1990 MHz</li> <li>▪ Half power beamwidth: 70° / 70° (vert./hor.); 8 dBi Gain</li> <li>▪ Wall mounting socket included</li> </ul>
3DC01001AA	DC Bloc	<ul style="list-style-type: none"> <li>▪ SMA DC bloc</li> </ul>

## 6. Annexes

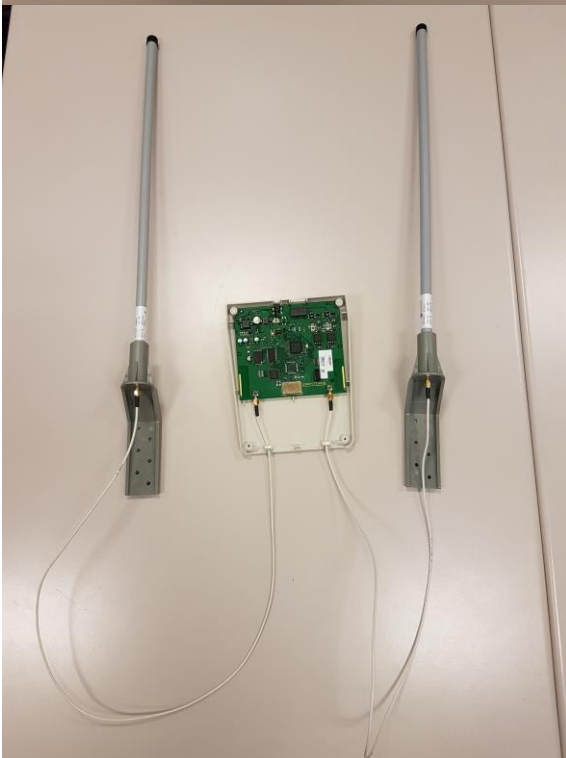
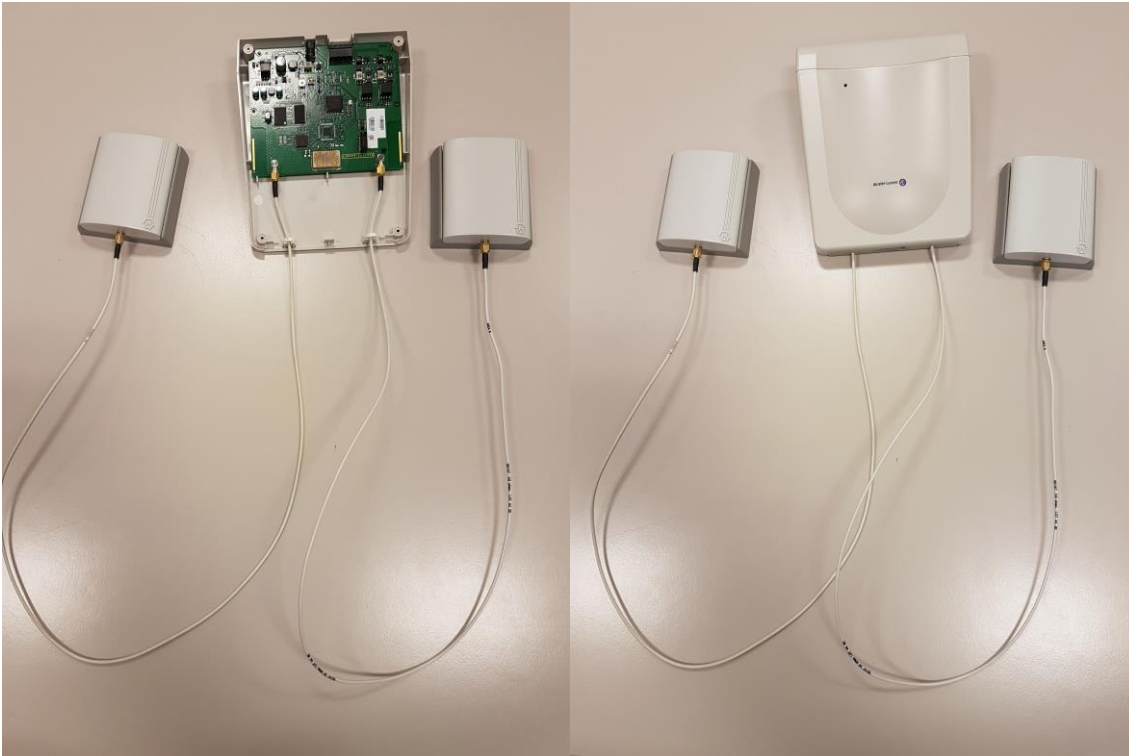
### 6.1 Products Photo

Hereafter you find a portfolio with some photo presenting the different IBS. Not all combination of external antenna are presented, but at least one of each.

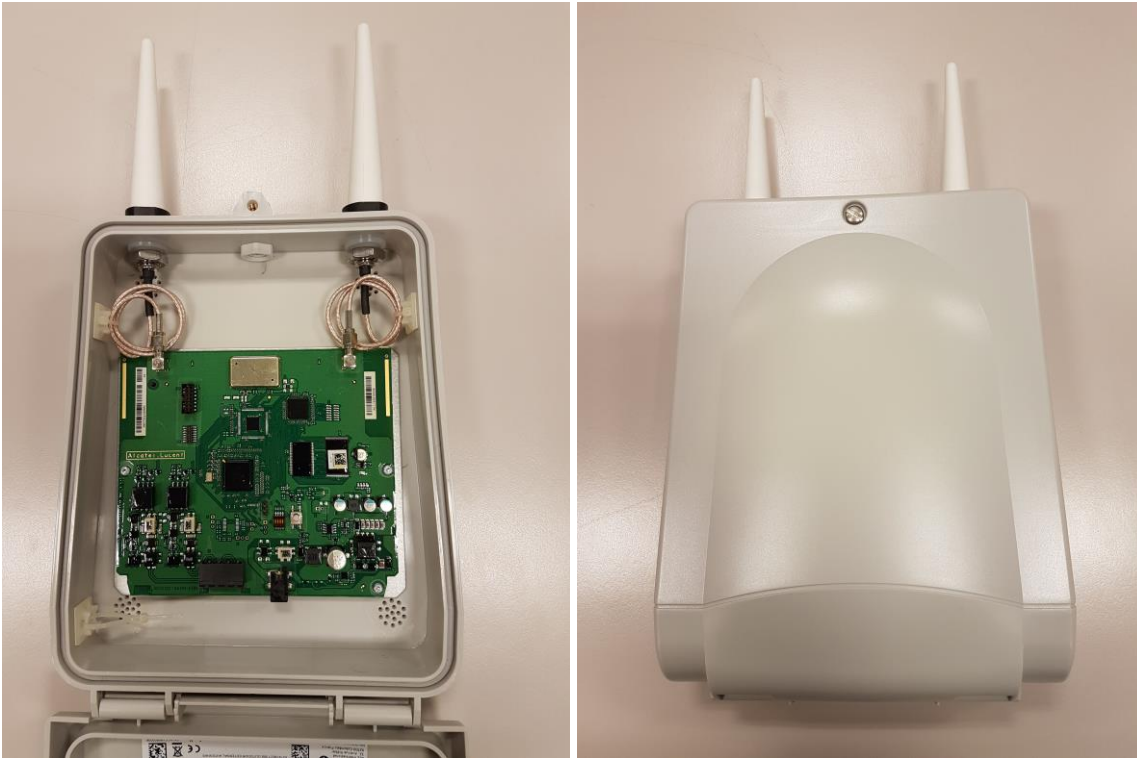
#### 6.1.1 3BN77020BA 8379 DECT IBS INTEGRATEDANTENNAS



### 6.1.2 3BN77020CA 8379 DECT IBS FOR EXTERNAL ANTENNAS



### 6.1.3 3BN77020DA 8379 DECT IBS OUTDOOR EXTERNAL ANTENNAS



## 6.2 Antenna specs

### 6.2.1 MA300x05

 <b>MAT</b> <i>Equipment</i>	OMNIDIRECTIONAL ANTENNA 2 dBi <b>1880 - 1930 MHz</b>																																		
<h1 style="margin: 0;">MA300X05</h1> <p style="margin: 10px 0;">MA300X05 is an omnidirectional dipole antenna. It is supplied with the nut and the washer needed for mounting through a hole.</p>																																			
<p><b>TECHNICAL DATA :</b></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;"><b>Product code</b></td> <td>MA300X05</td> </tr> <tr> <td><b>Frequency range</b></td> <td>1880 to 1930 MHz</td> </tr> <tr> <td><b>Nominal impedance</b></td> <td>50 ohms</td> </tr> <tr> <td><b>VSWR</b></td> <td>≤ 1.5</td> </tr> <tr> <td><b>Polarization</b></td> <td>linear, vertical (antenna installed vertical)</td> </tr> <tr> <td><b>Gain</b></td> <td>2 dBi</td> </tr> <tr> <td><b>Radiation in horizontal plane</b></td> <td>omnidirectional</td> </tr> <tr> <td><b>Radiation in vertical plane</b></td> <td>beamwidth (E plane) at -3 dB : ≈ 70°</td> </tr> <tr> <td><b>Maximum power</b></td> <td>5 watts</td> </tr> <tr> <td><b>Connector</b></td> <td>SMA male at the end of a RG316 coaxial cable (overall length : ≈ 360 mm)</td> </tr> <tr> <td><b>Height</b></td> <td>116 mm above mounting surface</td> </tr> <tr> <td><b>Shroud diameter</b></td> <td>19.2 mm the base</td> </tr> <tr> <td><b>Shroud material / color</b></td> <td>UV-resistant white plastic, UL94HB</td> </tr> <tr> <td><b>Weight</b></td> <td>≈ 70 g</td> </tr> <tr> <td><b>Temperature range</b></td> <td>-33°C to +55°C</td> </tr> <tr> <td><b>Environment</b></td> <td>ETS 300 019-2-3, specification T3.3</td> </tr> <tr> <td><b>Wind speed</b></td> <td>160 km/h</td> </tr> </table>		<b>Product code</b>	MA300X05	<b>Frequency range</b>	1880 to 1930 MHz	<b>Nominal impedance</b>	50 ohms	<b>VSWR</b>	≤ 1.5	<b>Polarization</b>	linear, vertical (antenna installed vertical)	<b>Gain</b>	2 dBi	<b>Radiation in horizontal plane</b>	omnidirectional	<b>Radiation in vertical plane</b>	beamwidth (E plane) at -3 dB : ≈ 70°	<b>Maximum power</b>	5 watts	<b>Connector</b>	SMA male at the end of a RG316 coaxial cable (overall length : ≈ 360 mm)	<b>Height</b>	116 mm above mounting surface	<b>Shroud diameter</b>	19.2 mm the base	<b>Shroud material / color</b>	UV-resistant white plastic, UL94HB	<b>Weight</b>	≈ 70 g	<b>Temperature range</b>	-33°C to +55°C	<b>Environment</b>	ETS 300 019-2-3, specification T3.3	<b>Wind speed</b>	160 km/h
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<div style="display: flex; align-items: center;"> <div style="flex: 1;"> <p><b>Grounding</b>      the inner conductor of the connector is not DC grounded.</p> <p><b>Mounting</b>        through a hole. The antenna has a M12 threaded base, 17mm long, and is supplied with a nut and a plastic locking washer.</p> </div> <div style="flex: 1; text-align: center;">  </div> </div>																																			
<p><i>Typical VSWR versus frequency (GHz) :</i></p> 																																			
DT 5109 - Ed B anglais - page 1/1 - We reserve the right to modify our products without prior notice.																																			

**MAT Equipment** - 17 bis, rue du Chemin Vert - 94100 Saint-Maur-des-Fossés - France - Tel. : +33 (0)1 55 96 10 10

6.2.2 MA430x12



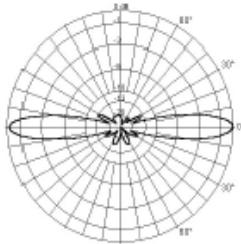
- MA430X12 -



MA430X12



Vertical Plane



OMNIDIRECTIONAL ANTENNAS

MA430X12 is an omnidirectional colinear antenna fitted with a SMA female connector and a plastic mounting bracket.

Type	MA430X12
Frequency (MHz)	1880-1900
VSWR	<1.5 : 1
Gain (dBi)	8
Polarisation	Vertical
E Plane Beamwidth (-3 dB Points)	17°
Maximum Power (Watts)	10
Termination	SMA socket
Dimensions mm	73 - Ø 1.5
Weight (kg)	0.235
Windloading @45 m/s (N)	26 at 160 km/h
Colour	Grey
Shroud	Glass fibre
Brackets / Mounting	Plastic mounting bracket
Packing Details	
Packing	Individual plastic bag
Dimensions mm	73
Weight (kg)	0.4



reserve the right to modify or amend any antenna or specification without prior notice  
The specification shown above is indicative of the product  
and full technical details can be obtained directly from the company

Web Site: [www.jaybeamwireless.com](http://www.jaybeamwireless.com)

6.2.3 1319.19.0004

Data Sheet



**SENCITY® Spot-S indoor Antenna**  
**1319.19.0004**

SPA-1900/70/8/0/LCP

**Description**

SENCITY Spot-S planar indoor DECT antenna  
Polarisation: LHCP circular left-hand  
Working range: 1850 to 1990 MHz  
Half power beamwidth: 70° / 70° (vert./ hor.), 8 dBi Gain  
Wall mounting socket included



**Product Configuration**

**Technical Data**

**Electrical Data**

Band 1	
Frequency (MHz)	1850 - 1990
VSWR	1.5
Impedance (Ohm)	50
Gain (dBi)	8
3dB beamwidth (h) (°)	70
3dB beamwidth (v) (°)	70
Front to back ratio (dB)	20
Axial ratio (dB)	3
Vertical electrical tilt (°)	0

**Ports**

Port 1	
Connector	SMA, jack (female)
Polarization	circular left

**General Data**

DC Grounding	No
Composite Power max (W)	10

**Mechanical Data**

Dimensions (mm)	101 x 95 x 32 (Height x Width x Depth)
Weight (kg)	0.115
Windload	frontal: 15 N at 160 km/h , Wind speed survival: km/h
Included mounting material	Wall mounting material

Mounting socket material: ASA and aluminium

Mounting socket colour: RAL 7042 (dark grey)

**Environmental Data**

Environmental conditions	indoor
Operation temperature (°C)	-40 to 80
Storage temperature (°C)	-40 to 80
Transport temperature (°C)	-40 to 80
RoHS 2011/65/EU	compliant
REACH 2006/1907/EC	compliant

**Material Data**

Radome colour	RAL 7035 (light-grey)
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6.2.4 1319.19.0005

Data Sheet



**SENCITY® Spot-S indoor Antenna**  
**1319.19.0005**

SPA-1900/70/8/0/RCP

Description

SENCITY Spot-S planar indoor DECT antenna  
Polarisation: RHCP circular right-hand  
Working range: 1850 to 1990 MHz  
Half power beamwidth: 70° / 70° (vert./ hor.), 8 dBi Gain  
Wall mounting socket included



Product Configuration

Technical Data

Electrical Data

Band 1	
Frequency (MHz)	1850 - 1990
VSWR	1.5
Impedance (Ohm)	50
Gain (dBi)	8
3dB beamwidth (h) (°)	70
3dB beamwidth (v) (°)	70
Front to back ratio (dB)	20
Vertical electrical tilt (°)	0

Ports

Port 1	
Connector	SMA, jack (female)
Polarization	circular right

General Data

DC Grounding No  
Composite Power max (W) 10

Mechanical Data

Dimensions (mm) 101 x 95 x 32 (Height x Width x Depth)  
Weight (kg) 0.115  
Windload frontal: 15 N at 180 km/h , Wind speed survival: km/h  
Included mounting material Wall mounting material

Mounting socket material: ASA and aluminium

Mounting socket colour: RAL 7042 (dark grey)

Environmental Data

Environmental conditions indoor  
Operation temperature (°C) -40 to 80  
Storage temperature (°C) -40 to 80  
Transport temperature (°C) -40 to 80  
RoHS 2011/65/EU compliant  
REACH 2006/1907/EC compliant

Material Data

Radome colour RAL 7035 (light-grey)  
Radome material ASA (acrylic ester-styrene-acrylonitrile)  
Back plate/base plate colour RAL 7042 (dark-grey)

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**END OF DOCUMENT**

OD-401366	V.2.2	IBS 8379 User Manual for installation		
Uffoltz Pierre	Draft- 11/04/2018	3BN77020xxxx	26/26	