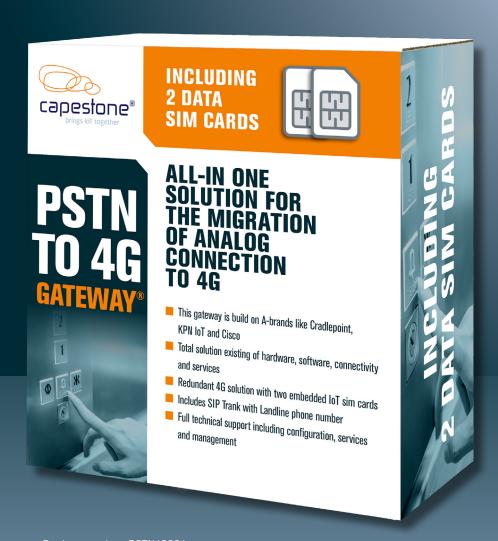
# General Service Description

# CAPESTONE PSTN TO 4G GATEWAY®



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**Appendix 1:** Service description Service Level Agreement

**Appendix 2:** Configuration Packages for IoT hardware and connectivity

# 1. ALL-IN ONE SOLUTION FOR THE MIGRATION OF ANALOG CONNECTION TO 4G

The CAPESTONE PSTN TO 4G IOT GATEWAY® has been specially developed to facilitate a future proof migration of analog networks and connections to 4G.

#### 1.1 What is PSTN?

There are still many Public Switched Telephone Network (PSTN) networks and connections in Europe. The analog endpoint of this network is called POTS; (Plain Old Telephone Service) and is still widely used for connecting all kinds of devices and machines. Operators and network owners will phase out this network service in the coming years to make the migration to a new kind fixed connection, such as fiber optic. Capestone offers a migration solution based on 4G.

#### 1.2 Future-proof 4G solution

Our mission is to make complex technology and solutions accessible to our partners and customers. Always and everywhere internet wherever you are, whatever the underlying solution should be, we work on that every day.

The CAPESTONE PSTN TO 4G GATEWAY® offers a total solution for issues related to migration from analog connections to new technology. With this gateway we ensure that the existing infrastructure within a building, multi-company building or other object remains intact. The migration is made as easy as possible so the actual end user experiences the same quality service as he is used to.

You can use the CAPESTONE PSTN TO 4G GATEWAY® to establish analog connections from, for example, elevators, alarms, report systems, analog telephony environments or barriers to IP.



## 2. CAPESTONE PSTN TO 4G GATEWAY®

The CAPESTONE PSTN TO 4G GATEWAY® is an all-in-one solution to easily migrate existing analog connections and telephone lines to a future-proof service. The CAPESTONE PSTN TO 4G GATEWAY® has an aluminum housing that consists of a combination of hardware, software and smart connectivity solutions to receive analog signals, convert them to SIP and then transport them securely over the Internet. The gateway includes a built-in IoT router with reliable 4G connectivity, including a 10-year warranty, a robust external antenna and cloud management tools to remotely manage the entire solution.

Below you can find the elements of the CAPESTONE PSTN TO 4G GATEWAY®

#### 2.1 Content Overview CAPESTONE PSTN TO 4G GATEWAY®

- ✓ 1x CAPESTONE PSTN TO 4G GATEWAY® aluminum housing
- 1x Cradlepoint IBR600c IoT router with dual-SIM
- ✓ Includes Cradlepoint Netcloud Essentials for remote management and cloud management
- 1x Grandstream ATA converter
- ✓ 1x Comgate IoT SIM card including 500MB data bundle for the Netherlands and Europe
- 1x Compate IoT SIM card as backup
- ✓ 1x Capestone 4G MiMo vandal resistant puck antenna
- ✓ Including Capestone SIP Trunk (VoiP) + 250 minutes (Netherlands)
- ✓ Including 1x Fixed Phone Number
- ✓ Including Capestone Service Level Agreement "Office Hours"

#### 2.2 Cradlepoint IBR600c 4G/IoT router

The Cradlepoint COR IBR600c is a robust router especially for business critical IoT and connectivity.

- Robust 4G Cat.4 IoT router with max. 150Mbps download for industrial IoT solutions
- Dual-SIM with automatic operator switch for maximum 4G reception.
- Metal housing
- Working temperature: -20° to 60° C
- Operating humidity: 5 to 95% non-condensing
- Includes limited lifetime warranty.
- Includes access to Cradlepoint Netcloud for remote management
- Includes 2x LAN/WAN port and WiFi
- 2 SSIDS/WiFi networks simultaneously possible
- 2 external antenna connections for the Capestone 4G antenna.
- 2 external WiFi antenna connections
- 1 GPS connector for external GPS antenna



#### 2.3 2.3 Integrated 4G MiMo antenna

The aluminum housing of the CAPESTONE PSTN TO 4G GATEWAY® contains an integrated 4G puck on the top antenna. This antenna housing contains 2 antennas that are connected directly to the router to make use of the MIMO (Multiple-in-Multiple-Out) technology and enjoy the fastest speeds and best reception.

The vandal-resistant 4G MIMO antenna has a 17 mm screw thread on the bottom through which the cable runs. This ensures an extremely robust 1-hole mounting.

Specifications integrated Capestone 4G antennas

Cable (length): 2x 0.2 meters. RG174 (SMA-M)

Gain: 0-3 dBi (frequency dependent)

Max Power: 20 WattVSWR: < 3.0 Typical</li>Impedance: 50

Mounting: Fixed mounting to CAPESTONE PSTN TO 4G GATEWAY®.
 Dimensions: diameter 78.8 mm, height 21.3 mm, total height 34.5 mm

Temperature range: -40°C to 85°C

#### 2.4 Grandstream HT802 ATA converter

The built-in ATA converter is designed to connect analog devices at home or in the office to a VoIP network. The HT802 is a powerful analog telephone adapter that is easy to deploy and manageable via the interface. It is equipped with 2 FXS-ports to create a high-quality network solution. The HT802 delivers powerful VoIP technology and routing capabilities for home and office environments, enabling users to successfully connect their analog devices to a manageable and powerful VoIP network. This powerful ATA is based on Grandstream's leading SIP ATA / gateway technology with millions of units successfully worldwide implemented. This ATA provides exceptional voice quality in a variety of applications and environments. The HT802 comes with 2 easy-to-use FXS-ports, state-of-the-art encryption with a unique security certificate per unit, automated volume deployment and device management and excellent network performance.

This ATA converter has the following important features;

- Supports 2 SIP profiles through 2 FXS-ports and a single 10/100Mbps port
- TLS and SRTP security technology to protect calls and accounts
- Automated provisioning options include TR-069 and XML configuration files
- Supports 3-way voice conferencing
- Failover SIP server automatically switches to secondary server when the connection disconnects from the main server
- Supports T.38 fax for making Fax-over-IP
- Supports a wide variety of Caller ID formats



#### 2.5 Two embedded IoT data cards

The CAPESTONE PSTN TO 4G GATEWAY® comes standard with two embedded IoT SIM cards to ensure that the solution is redundant and the uptime as high as possible.

#### Included in CAPESTONE PSTN TO 4G GATEWAY® - DUAL SIM

#### Primary SIM card

✓ Product: Comgate IoT SIM

✓ Data bundle: Including 500 MB Europe per month (pooled)

✓ Network: KPN in the Netherlands; Abroad: 3 networks per country.

✓ APN: comgate.m2m

✓ Portal: Cisco Jasper Connectivity Management Platform

#### Secundary SIM card

✓ Product: Comgate IoT eSIM

✓ Data bundle: Including 500 MB Europe per month (pooled)✓ Network: Multi-operator in the Netherlands and Europe

✓ APN: internet.apnconnect.com✓ Portal: Comgate IoT eConnect Platform

The amount of the data bundle can be adjusted both up and down each month during the term of the CAPESTONE PSTN TO 4G GATEWAY® SIP Trunk and Landline phone number

#### 2.6 SIP Trunk and Landline phone number

A SIP Trunk (Session Initiation Protocol) makes it possible to transport all kinds of multimedia communications, including data communications and Voice over IP (VoIP) over the Internet. SIP thus replaces the traditional analog line. When commissioning the CAPESTONE PSTN TO 4G GATEWAY® Capestone ensures that the telephone number of the analog line is ported to the SIP Trunk of the CAPESTONE PSTN TO 4G GATEWAY®. This means that the telephone number is converted to IP, and traffic can be transported over the 4G connection of the Comgate IoT SIM card.

#### Which solutions is standard included in the CAPESTONE PSTN TO 4G GATEWAY®?

- A SIP Trunk with 1 simultaneous call. Optionally, multiple channels can be purchased.
- A fixed phone number: Capestone will port the phone number from the analog line to the SIP Trunk through which the traffic is transported over the 4G connection.
- Call traffic: the monthly price of the CAPESTONE PSTN TO 4G GATEWAY® includes a bundle as standard of 250 minutes of calling all regular Dutch fixed and mobile phone numbers.

#### What is not included in the CAPESTONE PSTN TO 4G GATEWAY®?

- Termination of existing analog / PSTN connection. The contract holder of the connection must cancel the subscription with the current provider after the date of porting the telephone number.
- Calling 0900 numbers, service numbers and international calls.



# 3. CONFIGURATION, SERVICE AND MANAGEMENT

You deserve the best service. This means that you always immediately get an employee on the line. We help you directly with the things you don't want to worry about, so that you can focus on your company. Not only do you get the service, but you also get the reliability you deserve from working with trusted brands and networks.

Thanks to our many years of experience in IoT, Mobile Broadband and Telecommunications, we can provide our customers with optimal support, in all industries and for all kinds of applications.

With the CAPESTONE PSTN TO 4G GATEWAY® you benefit from the Service Level Agreement as standard; Office Hours. For an additional service level, please contact sales@capestone.nl

#### 3.1 Configuration

An integral part of the CAPESTONE PSTN TO 4G GATEWAY® is the "Advanced Configuration" Service. The Capestone engineers carry out various activities to make the Service as simple as possible to use. The document "Configuration Packages for IoT hardware and connectivity" describes this Service in further detail.

#### 3.2 Administration and management of IoT router and IoT connectivity

As soon as we receive and confirm your order, you will receive the login credentials from us to gain access to the following portals for managing your IoT routers and IoT SIM cards.

#### Cradlepoint - IoT router

You can log in with the credentials you have received from us to manage your Cradlepoint devices. A training from 60 minutes is included with this Service.

#### Comgate - IoT connectiviteit

Go to https://comgate.io/portal-inlog/ and select "Cisco Jasper" to manage the primary IoT SIM card and navigate to IoT eConnect (eSIM) to manage the secondary IoT SIM card. A 60-minute training is included in the service.

#### 3.3 Service Level Agreement

Capestone provides the Service Level Agreement "Office Hours" with this service as standard. The document "Service Description of the SLA" applies to this article. If desired, you can upgrade the SLA type to "Next Business Day" or "Always Online".

#### Content of the Comgate Service Level Agreement

Type	Service Level Agreement	Service Windows	KPI: Availability	KPI: Response time	KPI: Recovery time	Costs: per router per month
Α	Always Online	24 x 7	99,70 %	< 2 hours	< 4 hours	€ 5,00
N	Next Business Day	Office Hours	99,40 %	< 6 hours	< 8 hours	€ 2,50
0	Office Hours	Office Hours	95,00 %	< 8 hours	< 24 hours	€ 1,25

<sup>\*</sup> The hours within Office Hours apply to both SLA N and SLA O.
Only SLA A (Always Online) is calculated based on clock hours.



#### 3.4 Warranty & RMA

We do everything we can to keep the uptime of the CAPESTONE PSTN TO 4G GATEWAY® as high as possible. We do this on the one hand through our extensive services and on the other by supplying high-quality products. If a device nevertheless breaks down, it will always fall within the warranty conditions during the term of the Agreement. This means that;

- ✓ The defective device must be registered via the RMA procedure. You can find these at www.capestone.nl.
- ✓ You will receive an RMA form when you receive the new device, with which you can return the defective device can return.
- ✓ We will send a new device.



## 4. PRICING & DURATION

#### 4.1 Monthly costs CAPESTONE PSTN TO 4G GATEWAY®

Subscription	One-off costs	Costs per month	Duration
CAPESTONE PSTN TO 4G GATEWAY®	€ 150	€ 35	24 months
DUAL SIM	€ 150	€ 30	36 months

Included as standard in the CAPESTONE PSTN TO 4G GATEWAY® package;

- ✓ CAPESTONE PSTN TO 4G GATEWAY® aluminum housing
- ✓ Cradlepoint IBR600c IoT router with dual SIM
- ✓ Cradlepoint Netcloud Essentials for remote management and cloud management
- Cisco Jasper and IoT eConnect SIM management portals
- ✓ Grandstream ATA converter
- ✓ 2x Comgate IoT SIM card including 500Mb data bundle for the Netherlands and Europe
- ✓ Capestone 4G MiMo vandal resistant puck antenna
- ✓ Capestone SIP Trunk (VoiP) + 250 minutes of calls to Dutch numbers
- ✓ Fixed Phone Number
- Capestone Service Level Agreement "Office Hours"
- Advanced configuration

#### 4.2 Additional products and services

4G IoT SIM card	Costs per month	Duration
Comgate IoT SIM - 100 MB	€ 1,50	Individual
Comgate IoT SIM - 250 MB	€ 2,50	Individual
Comgate IoT SIM - 500 MB	€ 4,00	Individual
Comgate IoT SIM - 1.000 MB	€ 6,00	Individual

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The Comgate 500MB bundle is standard in the monthly amount. The bundle can be changed every month. The extra or less price will be settled the following month. One-time change costs are € 10.00 per time.

4G Services	One-off costs	Costs per month	Duration
Fixed IP address per SIM card	€ 5,00	€ 6,00	Individual
Custom APN/VPN	on request	on request	Individual
IMEI Whitelisting	€ 95,00	-	-

Standard Package	Ы

SIP Telephony Services	One-off costs	Costs per month	Duration
SIP Trunk + Landline phone number	€ 5,00	€ 2,00	Individual
Landline phone number	€ 2,50	€ 0,50	Individual

The Comgate SIP Trunk with 1x Landline Number is standard in the monthly amount. Extra Phone Numbers and SIP Trunks are calculated separately.



Hardware	One-off costs
Logo on housing	€ 50,00
APC UPS Emergency Power Supply	€ 125,00

#### Standard Package

Service Level Agreement	One-off costs	Costs per subscription per month	Duration
SLA: Office Hours	-	€ 1,25	Individual
SLA: Next Business Day	€ 25,00	€ 2,50	Individual
SLA: Always Online 24x7h	€ 25,00	€ 5,00	Individual

The SLA Office Hours is standard in the monthly amount. This can be changed once a year.

The extra or less price will be settled the following month. One-time change costs are € 25.00 per time.

The 'Cost per month' is based on the number of CAPESTONE PSTN TO 4G GATEWAY® subscriptions purchased.

Field services	One-off costs
Site Survey	On request
Installation on location - per gateway	On request



# **MORE INFORMATION**

Would you like more information about our All-in-One packages, 4G hardware or connectivity? Please contact our Sales department on +31 (0) 85 111 0838.

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Capestone & Comgate's terms and conditions apply to this All-In One Solution.

