### SIEMENS

## Gigaset C470 | C475

Gigaset C475

**Environmental Product Declaration** according to ISO 14021



### 1 Our environmental mission

We at Siemens Home and Office Communication Devices GmbH & Co. KG have a responsibility to society, and are dedicated to meeting that responsibility and helping to bring about a better world. Our ideas, technologies and actions serve people, society and the environment and the goal of our worldwide activities is to safeguard the foundations of human life. We acknowledge our responsibility for products over their entire lifecycle. The impact of our products on the environment is assessed in product and process planning, taking production, procurement, sales, usage, service and disposal into account.

### 2 Manufacturer

Siemens Home and Office Communication Devices GmbH & Co. KG Hofmannstrasse 61 81379 Munich Phone: +49 (0)89 722-0

Registered offices of the company: Munich

Commercial register: HR A 86401 (Munich Local Court) VAT reg. no.: DE 814469745 Tax number: 146/636/25500 WEEE reg. no.: DE 47474747

More information is available at: http://gigaset.siemens.com

### 3 Environmental management system

Siemens Home and Office Communication Devices is certified according to the quality standards EN ISO 14001 and ISO 9001.

ISO 14001 (Environment), certified since September 2007 by TüV SÜD

since September 2007 by TüV SÜD Management Service GmbH

ISO 9001 (Quality), certified

since February 17, 1994 by TüV SÜD Management Service GmbH





# 4 Product description

#### Gigaset C470 / C475

These new cordless phones - the Gigaset C470 and the C475 with an answering machine - make using the phone more convenient by offering a variety of features all at an affordable price. These include a color display and illuminated keypad, a full-duplex hands-free facility and a large phone directory for up to 150 numbers. Moreover, with new ECO DECT technology, they make a contribution to the environment by cutting power consumption by up to 60 percent compared to conventional phones, and variably adjust the transmission power of the base station and handset. Efficient technology enables a particularly long battery life as well as a talk time of up to 12 hours and a standby time of 300 hours.

#### **Product details**

Device	Gigaset C470/475
Usage	Analog connection /
	private branch exchanges
Standards	DECT, GAP, SMS protocol 1

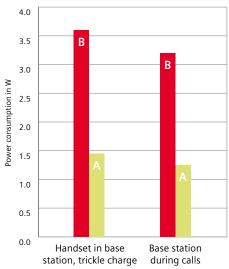
- Cordless analog phone, with/without answering machine
- Standby time 300 hours, talk time up to 12 hours
- > Color display, 6 lines, 4,096 colors
- Illuminated keypad
- Phone directory for up to 150 entries (name + number)
- Convenient hands-free feature in full-duplex quality
- Headset port (2.5 mm jack)
- ECO DECT
- SMS function, transmission of up to 612 characters
- Caller display (CLIP and CNIP)
- > Room surveillance (baby monitor)
- Gigaset C475: answering machine with up to 40 minutes recording time

### 5 Ecological power use – ECO DECT in the Gigaset C470 | C475

ECO DECT saves energy and makes an active contribution to environmental protection. ECO DECT addresses the following points:

1. The use of switched-mode power supplies (A) in the base station cuts consumption by up to 60% compared to conventional power supply units (B).

Base station power reduction Switched-mode versus conventional power supply

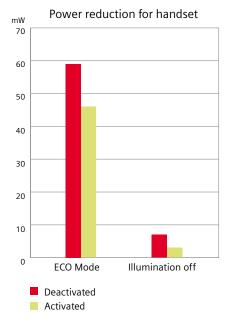








- 2. The new ECO DECT function complements this adjustment: the transmission power of the handset and base station **in idle mode are automatically** reduced to zero if the handset is in the base station and only one handset has been registered.
- 3. If customers select "ECO Mode," they can also **manually** reduce the transmission power of the base station and handset by 80%. The handset's power consumption can be cut by 20% increasing talk time by 25%; as a result, the range is reduced to about half the distance.
- For many years now, Gigaset DECT handsets have enabled the automatic adjustment of transmission power – depending on the distance to the base station. For example, transmission power is reduced by approximately 75% at a distance of up to five meters.
- In addition, customers can reduce the handset's power consumption by switching off its illuminated screen and keypad. As a result, 66% less electricity is consumed and the standby time is increased by 194%.

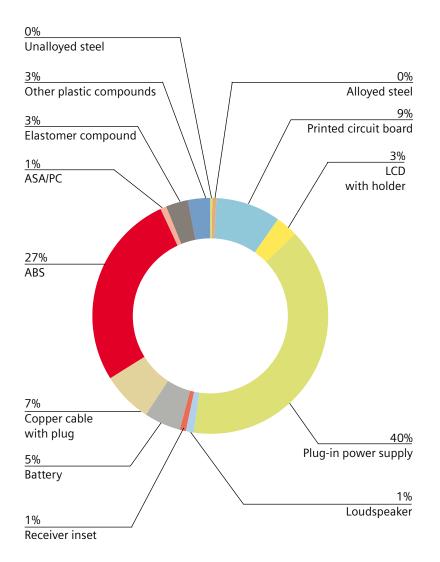


Usage phase Typical annual power consumption of the base station approx. 19 kWh/year

2,15 W x 24h x 365 days = 19 kWh/year

### 6 Environmental protection begins in the product creation phase

Gigaset C47H + C470 + charger cradle



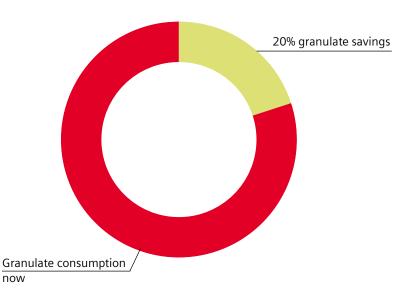


### 7 Material savings

#### 7.1 Thin-wall technology

Over the last few years thin-wall technology has been successfully implemented in phone cases. In this time, wall thicknesses have been reduced from 2.5 to 2.3 mm and are now at an average of 1.8 to 2 mm. This corresponds to granulate savings of more than 20%, without sacrificing mechanical stability and robustness.

#### Granulate savings with thin-wall technology



#### 7.2 Optimization of packaging

The weight (from 101.4 g [C450]  $\rightarrow$  85.2 g) and size of packaging (L x W x H: 248 x 186 x 88 mm  $\rightarrow$  224 x 166 x 88 mm) have been significantly reduced. As a result, far more units (26%) can now be transported in each shipping container.

The basic purpose of primary packaging is to protect the product. Drop and continuous shock testing (simulating transportation) are required. We use LDPE film to protect the surfaces of certain parts, as well as 100% recycled corrugated cardboard as packing material. Film usually accounts for around 4% of the total packaging. Both this film and cardboard can be recycled.

### 8 Manufacturing

#### 8.1 Environmental requirements

The Gigaset C470 and C475 are manufactured exclusively in Germany. SHC attaches prime importance to compliance with all relevant laws and regulations. Through its management system and environmental performance SHC is able to meet these requirements and will keep on improving. It goes without saying that SHC also respects all local environmental requirements.

#### 8.2 Effects of automation

Moreover, the high degree of automation in SHC's production processes has a limited impact on the environment through energy saving and efficient machine utilization. For example, the electronic circuit board of these devices is produced solely on a production line with a cycle time under 6 seconds and an efficiency greater than 75%.

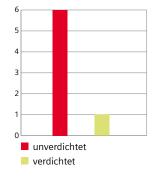
#### 8.3 Manufacturing concepts

SHC believes in a short feedback path for testing. All process parameters are controlled cyclically so that any problems can be detected promptly (before they arise) and non-conformance is minimized. Every step in the value chain is checked separately to help identify potential errors at an early stage.

Process controls and short feedback paths for testing therefore minimize material waste (components and process aids). Rejects are continuously monitored, with the goal of achieving a rate of less than 1%.

#### 8.4 Refuse disposal

Packaging material and electronic scrap are strictly separated in "environmental islands" at SHC's production facilities and recycled by local service providers. To reduce the volume, the individual materials are compacted by roller presses. The compaction ratio for cardboard boxes for example, is 6:1. This enables more efficient transportation of around 800 tons of cardboard a year.



#### 8.5 Work safety

SHC is especially committed to protecting the health and safety of its manufacturing employees, this is why SHC takes such great care to protect its employees at their workplace. This includes steps such as responsible management, instruction, sensitization and process engineering, prevention of and planning for emergencies, systematic investigation into the causes of accidents, quick availability of medical aid, documentation, regular reporting and continuous improvement.

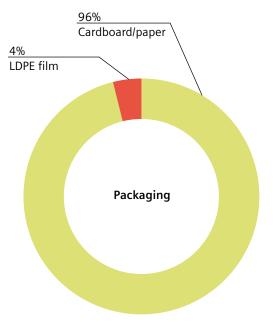




### 9 Transport packaging

All suppliers of packaging to Siemens Home and Office Communication Devices GmbH & Co. KG are members of RESY. RESY (Organisation für Wertstoff-Entsorgung GmbH), an organization for the disposal of valuable materials, was established in light of the German Packaging Ordinance. This ensures the return and recycling of packaging that is made from paper and cardboard and has been used in transportation within **Germany**. Each user is given a four-digit ID that has to be printed clearly and visibly on transport packaging made of paper and cardboard, along with the RESY symbol.

All secondary packaging has the RESY symbol on it to indicate that the specifications of the Packaging Ordinance for transport packaging have been met.



### **10** Distribution

When goods are shipped to the customer, they are consolidated regionally at the Siemens AG level and distributed as part of the IDS network. As a result, optimal use is made of the cargo space of each means of transport.

The Siemens Logistics Network (SLogN) is the basis for the efficient and secure movement of goods. The core of this transport network is a pool of highly qualified service providers who offer the best prices and performance thanks to the pooling of Siemens-wide needs.

The use of transportation resources is being optimized by continuing improvements in the size of product packaging. The packaging units of our suppliers are optimized ahead of procurement to ensure that the means of transport is fully loaded (e.g. containers in the case of sea freight).

In overseas logistics chains, we try to ensure that marine transport is used as much as possible. Transportation of goods by rail or inland waterway is preferred over trucks, reducing emissions by 50 percent. Air freight for transporting goods internationally is the exception; however shipment by sea has priority as a matter of principle.

### 11 Disposal

#### Our takeback concept

In accordance with European directives on the disposal of electrical waste and electronic equipment (2002/96/EC), packaging (94/62/EC) and batteries (91/157/EEC), these devices may not be thrown away as domestic refuse. The relevant national statutory regulations must be observed and the devices must be disposed of via the approved channels.







### 12 Our service concept

#### Should the need ever arise

If a device should ever prove to be faulty, it is not replaced by a new one, but repaired and returned free of defects to the customer. This concept creates significant advantages. When devices are replaced by previously repaired products the law requires that cosmetic parts, such as cradles, receiver insets or microphones are also replaced – something that our service concept eliminates, saving materials and resources.

This product environmental statement is not a warranty for the qualities of a product. It also does not warrant that the product retains a specific quality for a specific length of time. It is for information purposes only. We reserve the right to modify product design and specifications without prior notice. Please contact your Siemens representative to get the latest information.