

Coupler for Plasma Generation in a Chamber

Characteristics

- **Designed for direct coupling in chambers with a dielectric window**
- **Well suitable for setups with multiple coupling points**
- **Compatible with all HHF PlasMaster PCU generators**
- **Power handling for 2 to 400 W**
- **Ideal for self-made experimental setups**

Product description: Chamber Coupler CC 400

The Chamber Coupler CC 400 is well suited to couple microwave energy within the Industrial, Scientific and Medical frequency band (ISM band) at 2.45 GHz into a chamber to ignite and sustain a plasma (Fig. 1). For this purpose, the chamber merely requires a dielectric window.

The size of the resulting plasma is

- directly proportional to the microwave power applied,
- directly proportional to the number of chamber couplers used,
- inversely proportional to the pressure in the chamber,
- inversely proportional to the loss factor of the dielectric window,
- and a function of the implied gas (inert gases are the most common).

The Chamber Coupler CC 400 is designed for the PlasMaster PCU generator series, which continuously monitor the energy coupling in to the chamber and regulate the operating frequency accordingly, ensuring reproducible experiments under optimal operating conditions.

Apart from decontamination and surface activation in chambers, the Chamber Coupler CC 400 is well suited to drive lighting applications such as tubes or bulbs as well as other setups in a full dielectric housing or chamber.

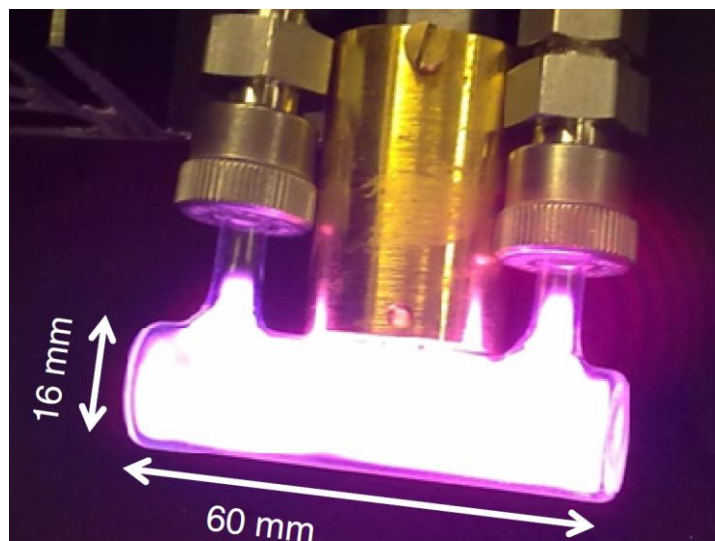


Fig. 1: The Chamber Coupler CC 400 used to produce a voluminous plasma using argon at 0.01 mbar with less than 50 W

Physical Specifications

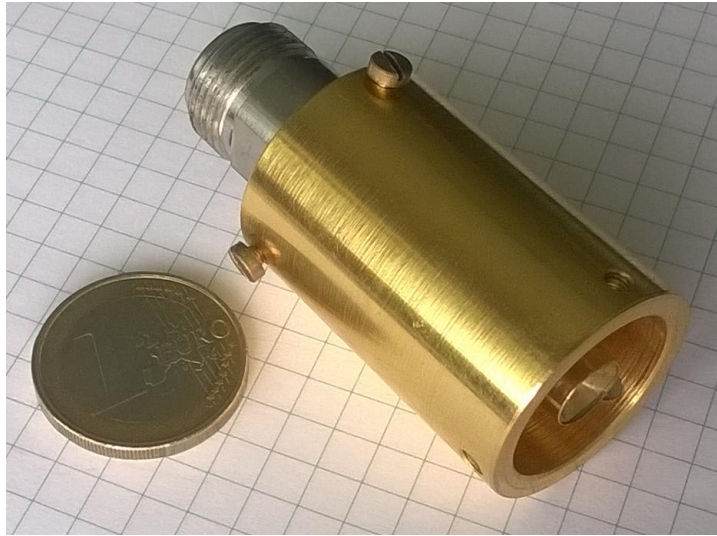


Fig. 2: The Chamber Coupler PS-CC400

Dimensions:

Diameter: 26 mm (outer tube)
Length: 56 mm

Connector: Standard N

Ordering information

The order number of the chamber coupler is: PS-CC400

Guaranty

The guaranty period is 2 after delivery.

The guaranty does not cover defects arising through wrong operation or improper usage, such as connectors not being attached.

Contact

Heuermann HF-Technik GmbH

Organization: Auf dem Anger 29, D-52076 Aachen, Germany

Tel.: +49 2408/9379019 (eventually answering machine)

Development and production: Juelicher Strasse 236, D-52070 Aachen, Germany

Tel.: +49 241/95451312

General: Mail: info@hhft.de ; Internet: <http://www.hhft.de/>

Fax: +49 2408/9379952