

# D-TEM TEM CELL FOR EMISSIONS AND IMMUNITY TESTING



**D-TEM-UCAR, D-TEM cell with under-carriage with locking casters**

- TEM cell meets ISO 11452-3 and CISPR 25
- EMC tests for vehicle components immunity to RF fields
- 300 mm septum height
- Up to 1 kW input power
- Access for field probes from the top of the cell

The transversal electromagnetic mode which can be developed in the D-TEM cell, provides the opportunity for doing EMC testing inside the cell. In principle, the D-TEM cell is a coaxial line expanding rectangularly and with planar septum. The geometrical dimensions having a line impedance of  $Z = 50 \Omega$ . At the end, the line is matched by a  $50 \Omega$  termination. Typical for this cell is the low power request for high field strength values.

The useable test volume is in relation to the application and required accuracy. Different EUT sizes may be possible in general. The area with the homogeneous field distribution is always in the middle of the upper and lower half of the DTEM.

## Applications

The D-TEM cell is compliant with ISO 11452-3 and CISPR 25 requirements, making it suitable for automotive component testing.

## Technical specifications

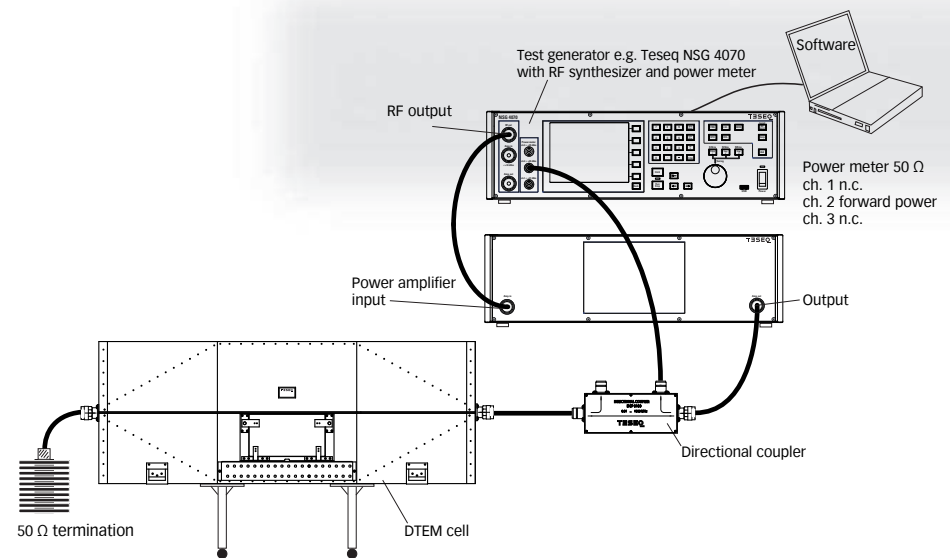
Height of the septum:	300 mm
Frequency range:	DC to 400 MHz
Max. input power:	1 kW
Impedance (RF ports):	$50 \Omega$
Connector type (RF ports):	N (female)
VSWR:	< 1.2 (up to 300 MHz)
Connector type (control ports):	BNC (female)
Numbers of control ports:	38
Dimensions (L x W x H in mm):	1700 x 980 x 650
Door (L x H in mm):	300 x 150
Opening, upper side for field probe:	$\varnothing 145$ mm
Weight:	approx. 45 kg

## Model No. and options

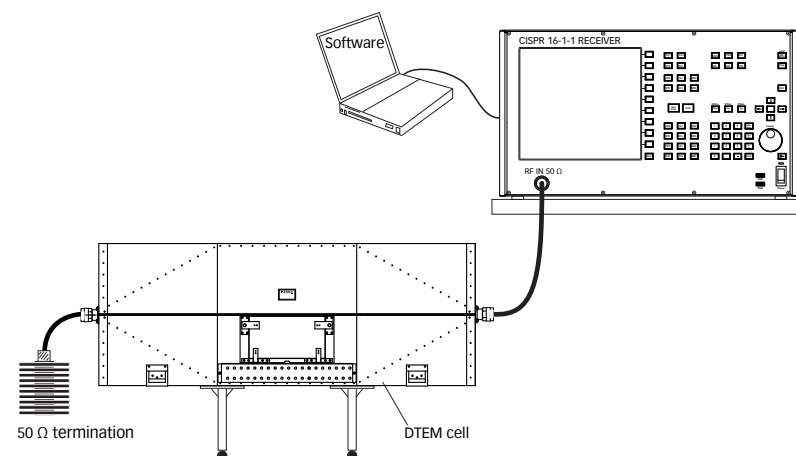
Part number	Description
240401	D-TEM TEM cell according with ISO 11 452-3, frequency range DC to 400 MHz, max. input power 1 kW, equipment opening: 300 x 150 mm, connector panel for EUT, BNC- sockets
260220	D-TEM-UCAR TEM cell according with ISO 11 452-3, frequency range DC to 400 MHz, max. input power 1 kW, equipment opening: 300 x 150 mm, connector panel for EUT, BNC- sockets, supplied with under-carriage and locking casters

# D-TEM TEM CELL FOR EMISSIONS AND IMMUNITY TESTING

Example setup for immunity testing



Example setup for emissions measurement



**AMETEK CTS Europe GmbH**  
Landsberger Str. 255 · 12623 Berlin · Germany  
T +49 30 56 59 88 35 F +49 30 56 59 88 34  
customer@cts.ametek.com  
[www.ametek-cts.com](http://www.ametek-cts.com)

© September 2021 Teseq®  
Specifications subject to change without notice.  
Teseq® is an ISO-registered company. Its products  
are designed and manufactured under the strict  
quality and environmental requirements of the ISO  
9001. This document has been carefully checked.  
However, Teseq® does not assume any liability for  
errors or inaccuracies.

82-240401 E03 September 2021