



## Features

- Newly refined 100 mm (4.0") ICT transducer for greater durability and longevity
- High power & high sensitivity with extended frequency response
- Wide, controlled, constant directivity dispersion for optimum coverage
- Does not suffer from energy loss in the vertical plane at crossover as with two-way discrete designs
- Low insertion-loss, 30 W line transformer for a more powerful and dynamic performance
- Convenient front-tapping switch for settings
- Adjustable tilt angle with 360-degree rotation to accommodate difficult loudspeaker placements
- Three-clamp, self-aligning mounting system
- UV resistant baffle and grille
- Packaged with classic grille, tile rails and C-ring for quick and easy installation and simple stocking logistics

## Applications

- Voice Alarm Systems
- Multizone Foreground Music & Paging Systems
- Boardrooms & Offices
- Business Music Systems
- Airports, Convention Centres, Hotels
- Reception / Waiting Rooms
- Houses of Worship
- Retail Outlets / Shopping Malls
- Lounges / Bars
- Cruise Ships
- Courtrooms

## Product description

The Tannoy CMS 403ICTe is a wide bandwidth, high power-handling and high sensitivity loudspeaker built around CMS 3.0 – the third generation of Tannoy's revolutionary Ceiling Monitor System technology. Incorporating a newly refined version of Tannoy's proprietary ICT™ point-source driver, the CMS 403ICTe has been re-engineered for optimum compatibility with Lab.gruppen commercial amplifiers while also delivering consistent broadband directivity, precise articulation for voice and music, and exceptional long-term reliability.

The point source configuration of the Tannoy ICT driver's mid-bass and tweeter sections ensures a wide and controlled dispersion for optimum coverage, avoiding significant energy losses in the vertical plane at the crossover frequency, a flaw inherent in typical two-way designs. The ICT (Inductive Coupling Technology) drive unit also addresses two common component failures in background music systems: the tweeter and the crossover. Use of wireless electromagnetic coupling to drive the tweeter means that no crossover is required, making the ICT drive unit exceptionally reliable and ideal for applications where constant heavy usage is the norm. The mineral-loaded polypropylene cone material and nitrile rubber surround further enhance durability and long-term reliability.

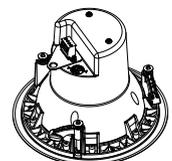
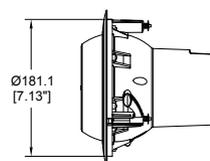
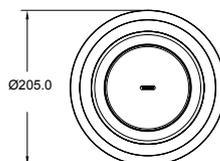
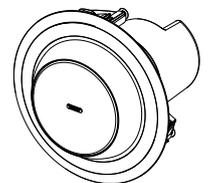
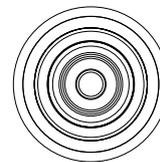
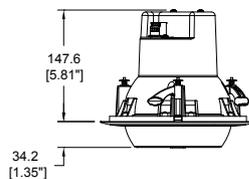
Specifically designed for fast, simple and cost effective installation in new and existing buildings, the CMS 403ICTe features a self-aligning clamp system. The "eyeball" design allows the driver to be entirely angled towards the listener within the fixed ceiling-mounting ring.

The CMS 403ICTe utilizes a 16 ohm driver, making it ideal for use in high performance low-impedance systems (with optimized performance when used in conjunction with Lab.gruppen LUCIA amplifiers). A low-insertion loss 30 W transformer is included, with convenient front switching for taps at 30 W, 15 W and 7.5 W, with an additional 3.75 W tap for traditional constant voltage systems.

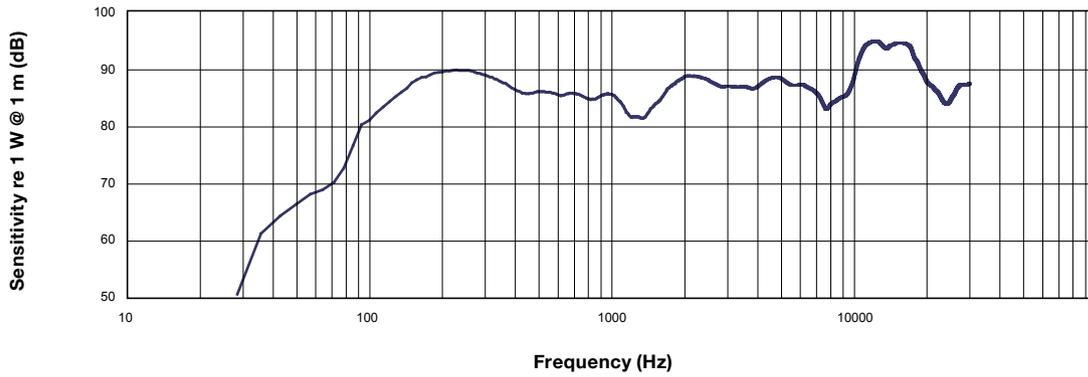
The CMS 403ICTe is supplied with an integral back-can, ready to install as a single unit. The removable locking connector has screw terminals for secure wire termination and loop-thru facility. All models are supplied with two tile support rails and one C-ring; a plaster mud ring is available as an optional accessory.

## Physical data

<b>Bezel diameter:</b>	205.0 mm (8.07")	<b>Hole Cutout Diameter:</b>	187.0 mm (7.36")
<b>Front of ceiling to rear of pod:</b>	147.6 mm (5.81")		

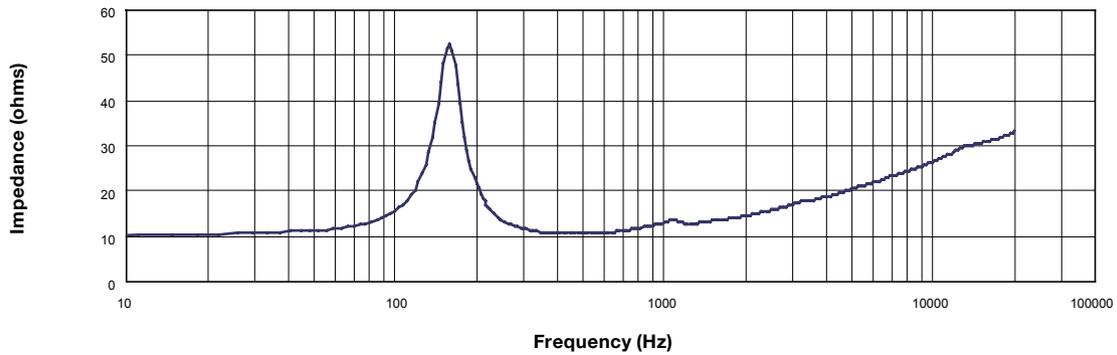


### 1 m on-axis Frequency Response



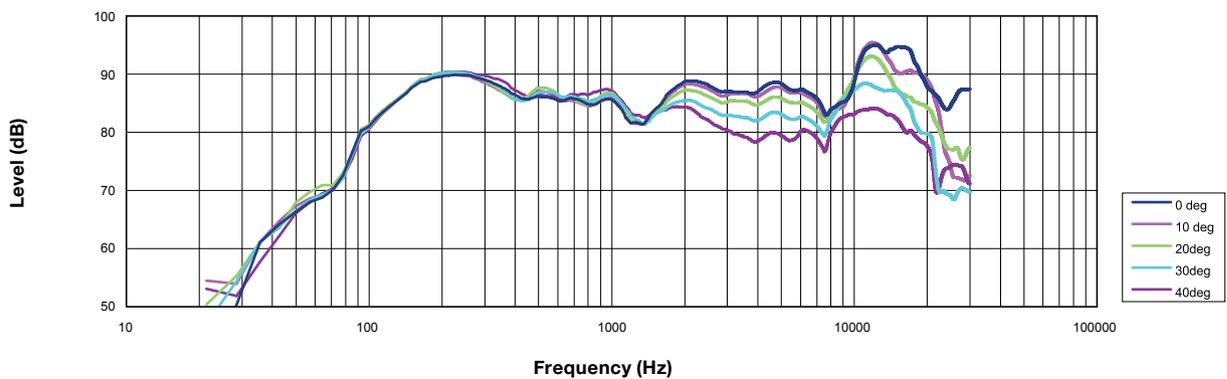
### Anechoic Frequency Response

### Impedance vs frequency



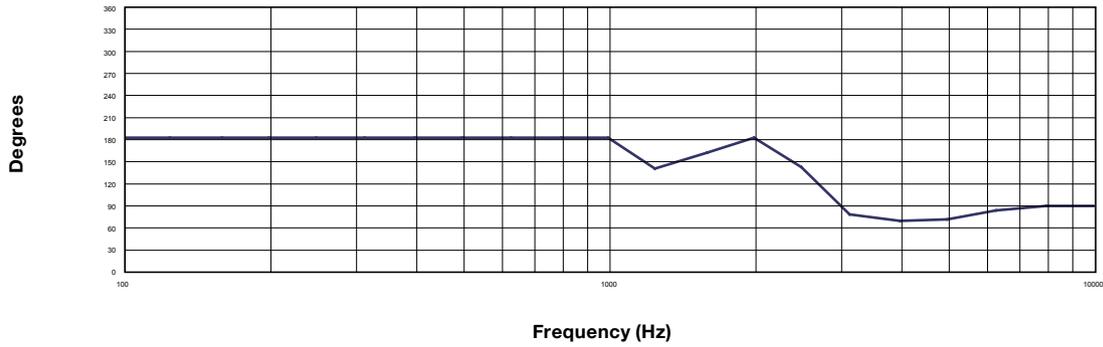
### Impedance

### Off-axis Frequency Response



### Off Axis Response

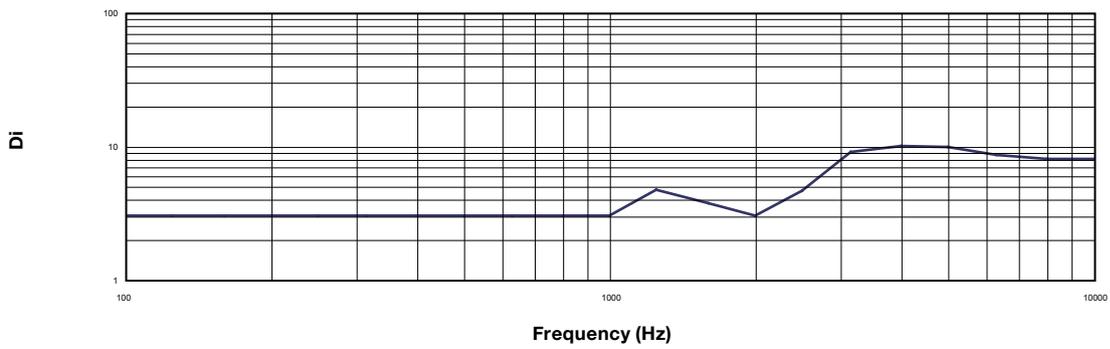
Beamwidth vs Frequency



Beamwidth

---

Directivity Index (DI)



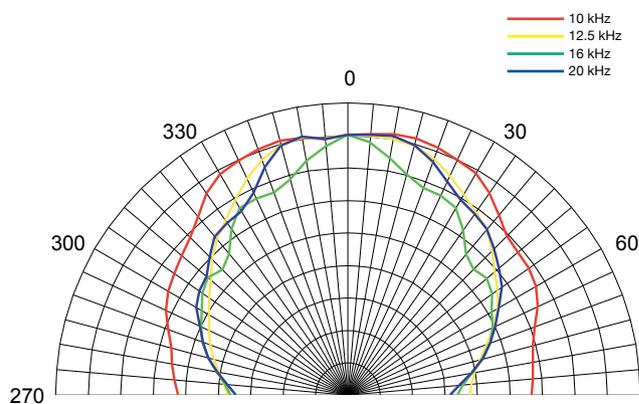
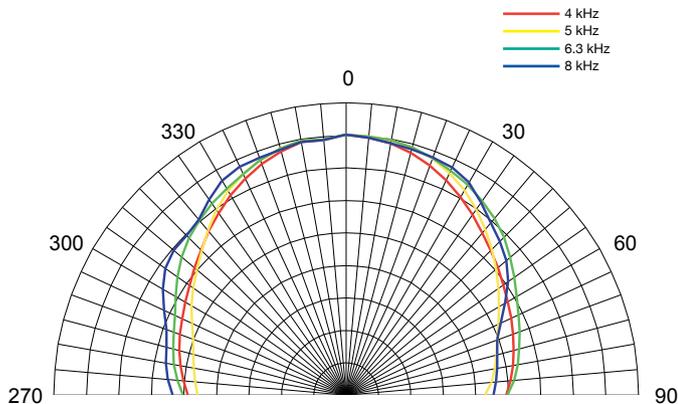
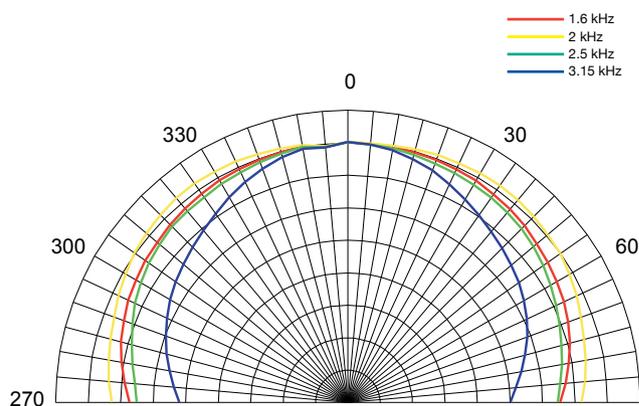
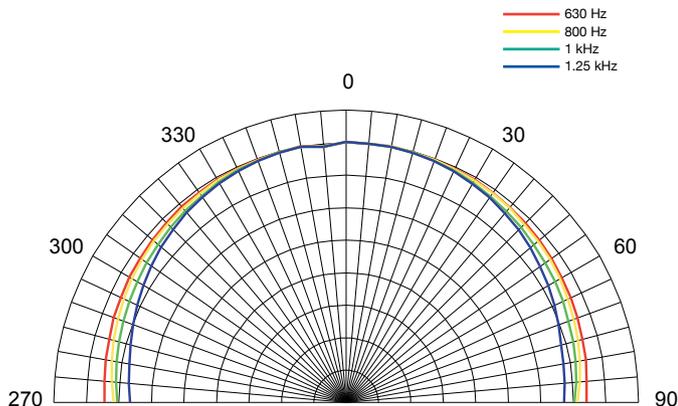
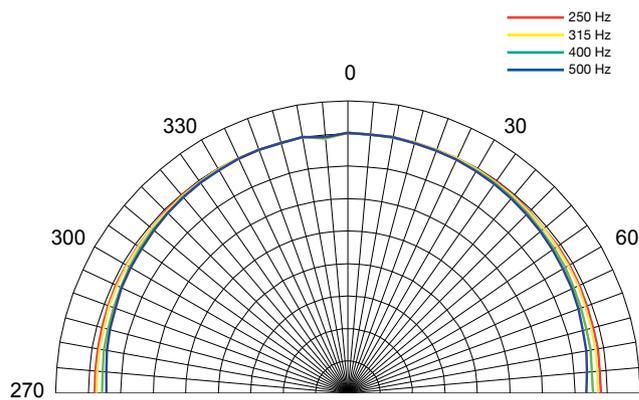
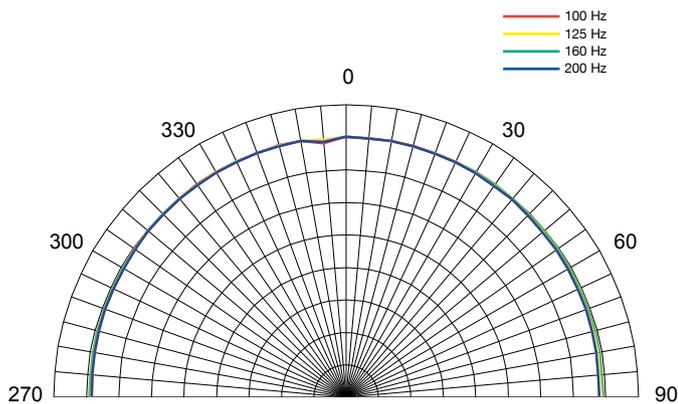
Directivity Index

---

# Technical Data Sheet

Polar plots (1/3 octave)

# CMS 403ICTe



# Technical Data Sheet

## Specifications

# CMS 403ICTe

### Performance

<b>Frequency response (-3 dB) <sup>(1)</sup></b>	110 Hz - 22 kHz
<b>Frequency range (-10 dB) <sup>(1)</sup></b>	80 Hz - 24 kHz
<b>System sensitivity (1 W @ 1 m) <sup>(2)</sup></b>	88 dB (1 W = 4 V for 16 Ohms)
<b>Nominal Coverage Angle</b>	90 degrees conical
<b>Coverage Angle (1 kHz to 6 kHz)</b>	120 degrees
<b>Directivity Factor (Q)</b>	5.26 averaged 1 kHz to 6 kHz
<b>Directivity Index (DI)</b>	6.30 averaged 1 kHz to 6 kHz
<b>Power Handling <sup>(3)</sup></b>	
Average	50 W
Programme	100 W
Peak	200 W
<b>Recommended Amplifier Power</b>	100 W @ 16 ohms
<b>Nominal Impedance (Lo, Z)</b>	16 ohms
<b>Rated maximum SPL</b>	
Average	105 dB
Peak	111 dB
<b>Transformer Taps (via front rotary switch)</b>	
70 V	30 W (165 Ω) / 15 W (330 Ω) / 7.5 W (660 Ω) / 3.75 W (1320 Ω) / OFF & low impedance operation
100 V	30 W (330 Ω) / 15 W (660 Ω) / 7.5 W (1320 Ω) / OFF & low impedance operation
<b>Crossover</b>	7 kHz inductively coupled

### Transducers

<b>Low Frequency</b>	100 mm (4.00") mineral loaded polypropylene
<b>High Frequency</b>	19 mm (0.75") ICT aluminium dome

### Physical

<b>Enclosure</b>	
Backcan	Reflex loaded UL 94V-0 rated ABS
Baffle	Reflex loaded UL 94V-0 rated ABS
Grille	Steel, with weather resistant coating
<b>Safety Features</b>	Safety ring located at rear of enclosure for load bearing safety bond
<b>Clamping Design</b>	Min / Max clamping range: 0.0 mm (0.0") / 20.0 mm (0.79") Recommended clamp torque: 1.5 Nm
<b>Connectors</b>	Removable locking connector with screw terminals with "loop through" facility
<b>Compliance</b>	UL-1480, UL-2043, CE
<b>Dimensions</b>	
Bezel diameter	205.0 mm (8.07")
Front of ceiling to rear of pod	147.6 mm (5.81")
<b>Hole cutout diameter</b>	187 mm (7.36")
<b>Net Weight (ea)</b>	2.86 kg (6.31 lbs)
<b>Included Accessories</b>	C-Ring, tile-bridge kit, paint mask, cut-out template, grille
<b>Optional Accessories</b>	Plaster (mud) ring
<b>Packed Quantity</b>	2

### Ordering Information

Part Number	Colour
8001 7760 CMS 403ICTe	White / Paintable
8001 4180 CMS 403e Plaster (Mud) Ring	Zinc Plated Steel



#### Notes:

1. Average over stated bandwidth. Measured in an IEC baffle in an Anechoic Chamber
2. Unweighted pink noise input, measured at 1 metre on axis
3. Long term power handling capacity as defined in EIA - 426B test

A full range of measurements, performance data, CLF and Ease™ Data for CMS 403ICTe can be downloaded from [www.tannoypro.com](http://www.tannoypro.com).

Tannoy operates a policy of continuous research and development. The introduction of new materials or manufacturing methods may introduce variations in actual performance; however, actual performance always will equal or exceed the published specifications, which Tannoy reserves the right to alter without prior notice. Please verify the latest specifications when dealing with critical applications.

Copyright (c) 2015 Tannoy Limited. All rights reserved.