## **Technical Data Sheet**

# CMS 603ICT LS





#### **Features**

- Newly refined 165 mm (6.5") 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, 60 W line transformer for a more powerful and dynamic performance
- Convenient front-tapping switch for settings
- Magnetically-adhering grille system for easy custom painting and optional Arco designer grilles for minimal architectural impact
- Four-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

### **Product description**

The Tannoy CMS 603ICT LS is a wide bandwidth, high power-handling and high sensitivity loudspeaker (certified UL-1480, category UUMW), for use with non-DC supervised systems. Built around CMS 3.0 – the third generation of Tannoy's revolutionary Ceiling Monitor System technology it incorporates a newly refined version of Tannoy's proprietary ICT™ point-source driver. The CMS 603ICT LS 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.

The CMS 603ICT LS 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). The low-insertion loss 60 W transformer features convenient front bezel switching for taps at 60 W, 30 W and 15 W, with an additional 7.5 W tap for traditional constant voltage systems.

The CMS 603ICT LS also features extra clamp extension to accommodate thicker ceiling panels, and a locking design that prevents inadvertent over-screwing. Magnetic grille attachment enables easy removal and fitting for custom painting and tapping changes with grilles now available as either traditional style (inset in bezel) or new Arco™ style, which conceals the entire unit for architect-friendly aesthetic appeal.

The CMS 603ICT LS is supplied with an integral zinc plated steel back-can, ready to install as a single unit and feature an integrated, recessed termination box. The removable locking connector has screw terminals for secure wire termination and loop-thru facility. Strain relief is provided by a clamping mechanism for use with plenum-rated cable or conduit, while new spring-loaded and self-aligning clamps make for even quicker and easier installation. All models are supplied with classic grille, two tile support rails and one C-ring; Arco grille and plaster (mud) ring are available as optional accessories.

## Physical data

rear of backcan:

Bezel diameter: 274
Front of ceiling to

274.0 mm (10.79") 256.5 mm (10.10")

)") **H**o

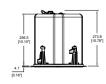
Hole Cutout Diameter: 253.0 mm (9.96")

Front of ceiling to

**top of safety loop:** 273.8 mm (10.78")

## **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









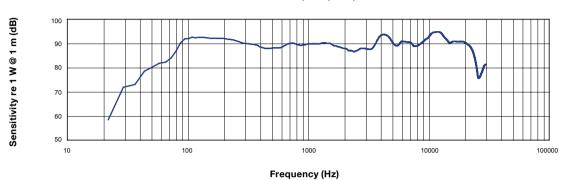






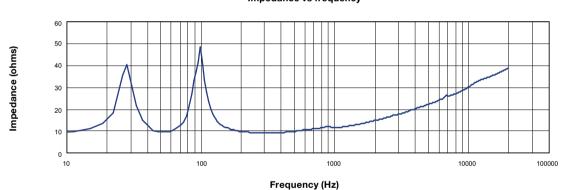
**Performance measurements** 





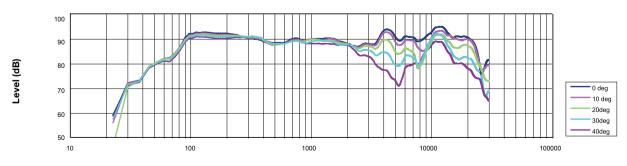
**Anechoic Frequency Response** 

#### Impedance vs frequency



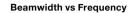
Impedance

#### **Off-axis Frequency Response**

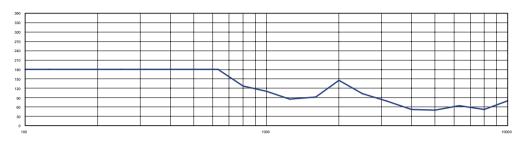


Frequency (Hz)

**Performance measurements** 



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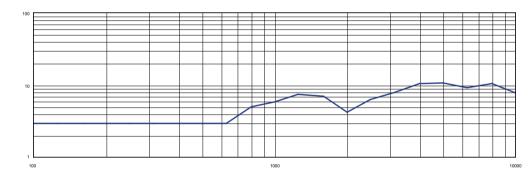


Frequency (Hz)

#### Beamwidth

#### Directivity Index (DI)





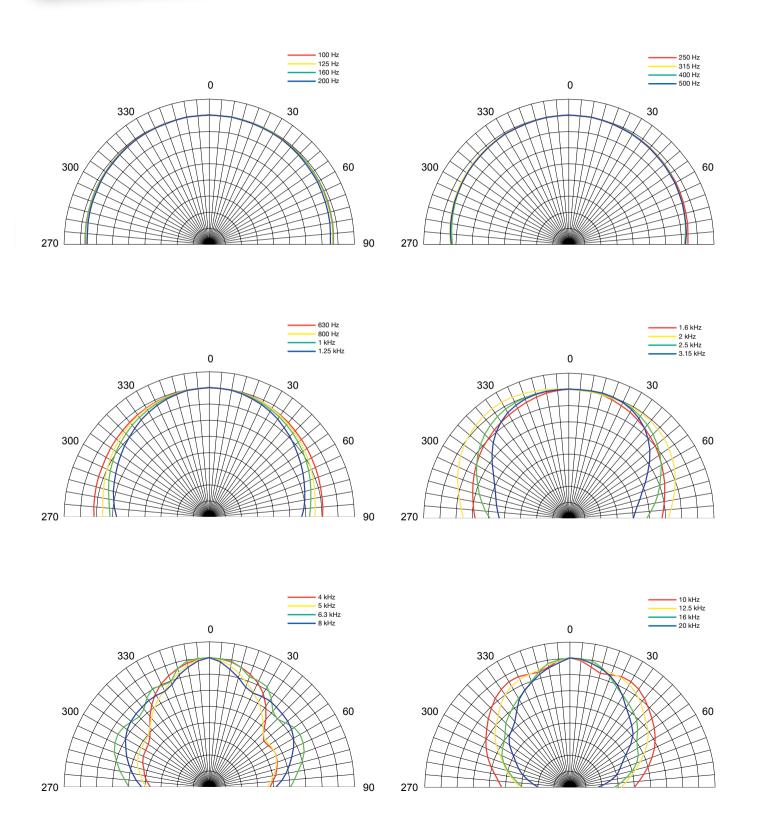
Frequency (Hz)

**Directivity Index** 

## **Technical Data Sheet**

# CMS 603ICT LS

Polar plots (1/3 octave)



## **Technical Data Sheet**

# CMS 603ICT LS

**Specifications** 

Performance

 Frequency response (-3 dB) (1)
 78 Hz - 22 kHz

 Frequency range (-10 dB) (1)
 51 Hz - 24 kHz

System sensitivity (1 W @ 1 m)  $^{(2)}$  91 dB (1 W = 4 V for 16 Ohms)

Nominal Coverage Angle 90 degrees conical

Coverage Angle (1 kHz to 6 kHz) 92 degrees

Directivity Factor (Q)
7.1 averaged 1 kHz to 6 kHz
Directivity Index (DI)
7.9 averaged 1 kHz to 6 kHz

Power Handling (3)

 Average
 60 W

 Programme
 120 W

 Peak
 240 W

Recommended Amplifier Power 120 W @ 16 ohms

Nominal Impedance (Lo, Z) 16 ohms

Rated maximum SPL

Average 109 dB Peak 115 dB

Transformer Taps (via front rotary switch)

70 V  $60~W~(83~\Omega)~/~30~W~(165~\Omega)~/~15~W~(330~\Omega)~/~7.5~W~(660~\Omega)~/~12~W~(660~\Omega)~/$ 

OFF & low impedance operation

100 V 60 W (165 Ω) / 30 W (330 Ω) / 15 W (660 Ω) /

OFF & low impedance operation

**Crossover** 7 kHz inductively coupled

Transducers

**Low Frequency** 165 mm (6.50") treated multi fibre paper pulp cone

High Frequency ICT aluminium dome

Physical Enclosure

Backcan Zinc plated steel

Baffle Reflex loaded UL 94V-0 rated ABS
Grille Steel, with weather resistant coating

Safety Features Safety ring located at rear of enclosure for load bearing safety bond

Clamping Design Security toggle clamp

Min / Max clamping range 9.5 mm (0.37") /

60 mm (2.36")

Recommended clamp torque: 1.5 Nm

Backcan Options Complete with fixed backcan

 Cable Entry Options
 Cable clamp & squeeze connector for conduit up to 22 mm

 Connectors
 Removable locking connector with screw terminals with

"loop through" facility

Compliance UL-1480-UUMW, UL-2043, CE

Dimensions

 Bezel diameter
 274.0 mm (10.79")

 Front of ceiling to rear of backcan
 256.5 mm (10.10")

 Front of ceiling to top of safety loop
 273.8 mm (10.78")

 Hole cutout diameter (all models)
 253 mm (9.96")

 Net Weight (ea)
 5.41 kg (11.93 lbs)

Included Accessories C-Ring, tile-bridge kit, paint mask, cut-out template, grille

Optional Accessories Plaster (mud) ring, Arco grille

Packed Quantity 2

Ordering Information
Part Number

8001 7540
CMS 603ICT LS

White /
Paintable

8001 4181
CMS 603
Plaster (Mud) Ring

8001 7890
CMS 603 Arco Grille

White /
Paintable





UL-1480-UUMW, UL-2043

#### Notes:

- Average over stated bandwidth. Measured in an IEC baffle in an Anechoic Chamber
- an IEC baffle in an Anechoic Chamber

  Unweighted pink noise input, measured at
- Unweighted pink noise input, measured a
   metre on axis
- Long term power handling capacity as defined in EIA 426B test

A full range of measurements, performance data, CLF and Ease™ Data for CMS 603ICT LS can be downloaded from 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.

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