

## MTCS-TIAM

### OEM True-Color Sensor Modules

In addition to the true-color IC solutions, MAZeT offers a function board based on the MTCS series, which, enhanced by illumination, sensor electronics, software and drivers, presents customers with OEM solutions for color measurement and regulation.

These solutions can be customized equipped depending upon user function with light sources, amplifiers or sensors, e.g.:

#### MTCS-TIAM1

In addition to 2 white-light LEDs (optional) and a color sensor IC, the MTCS-TIAM1 board contains the entire programmable signal gain by means of very compact chip-on-board technology.

The board is provided in an optical channel (receivers and LEDs), each one with a mechanical aperture for compliance with the measurement geometry requirements. As compact and integrated detector, the module is suitable for color measurements of reflected surfaces.

#### MTCS-TIAM2

The MTCS-TIAM2 comprises a true-color sensor IC with an integrated programmable signal amplifier. The IC is packaged in a plastic casing and contains also the mechanical aperture for compliance with the measurement geometry requirements. The detector is suitable universal for a wide range of applications, e.g. control and regulation of light sources.

Name	MTCS-TIAM1	MTCS - TIAM2
Receiver / Detector	<ul style="list-style-type: none"><li>• True-Color-Sensor MTCSiCS</li><li>• optionally shutter in mechanical casing</li></ul>	<ul style="list-style-type: none"><li>• True-Color-Sensor MTCSiCS</li><li>• optionally shutter in mechanical casing</li></ul>
Amplifier	<ul style="list-style-type: none"><li>• MTI04C: programmable integrated amplifier (8 stages) with power down mode</li></ul>	
Illumination	<ul style="list-style-type: none"><li>• white-light LEDs on Board</li></ul>	---
Dimension	<ul style="list-style-type: none"><li>• with shutter 19,5 x 9,0 x 5,0mm</li></ul>	<ul style="list-style-type: none"><li>• with shutter 6,5 x 6,0 x 5,0mm (A)</li><li>• with shutter 6,5 x 1,5 x 5,0mm (B)</li></ul>
Application	<ul style="list-style-type: none"><li>• reflected color measurement, direct connect, e.g. to ADCs, <math>\mu</math>C with LED-driver and analogue/digital logics</li></ul>	<ul style="list-style-type: none"><li>• measurement and regulation of light colors and white points</li><li>• control of back-light or front-light von TV, Display, Beamer</li></ul>

#### Possible applications

Due to its integrated components and construction, the board is suitable for use *fig.: MTCS-TIAM2 and MTCS-TIAM3* as a complete sensor head for direct installation in measurement and control units. So general applications are universal color detection, regulation and measurement, consumer goods, portable color detection / readers, RGB-LCD backlight monitors, regulation of RGB power LEDs, detection of a wide variety of light sources. Within a Design-In project, the form and content of the TIAM function module can be adapted to customer requirements.