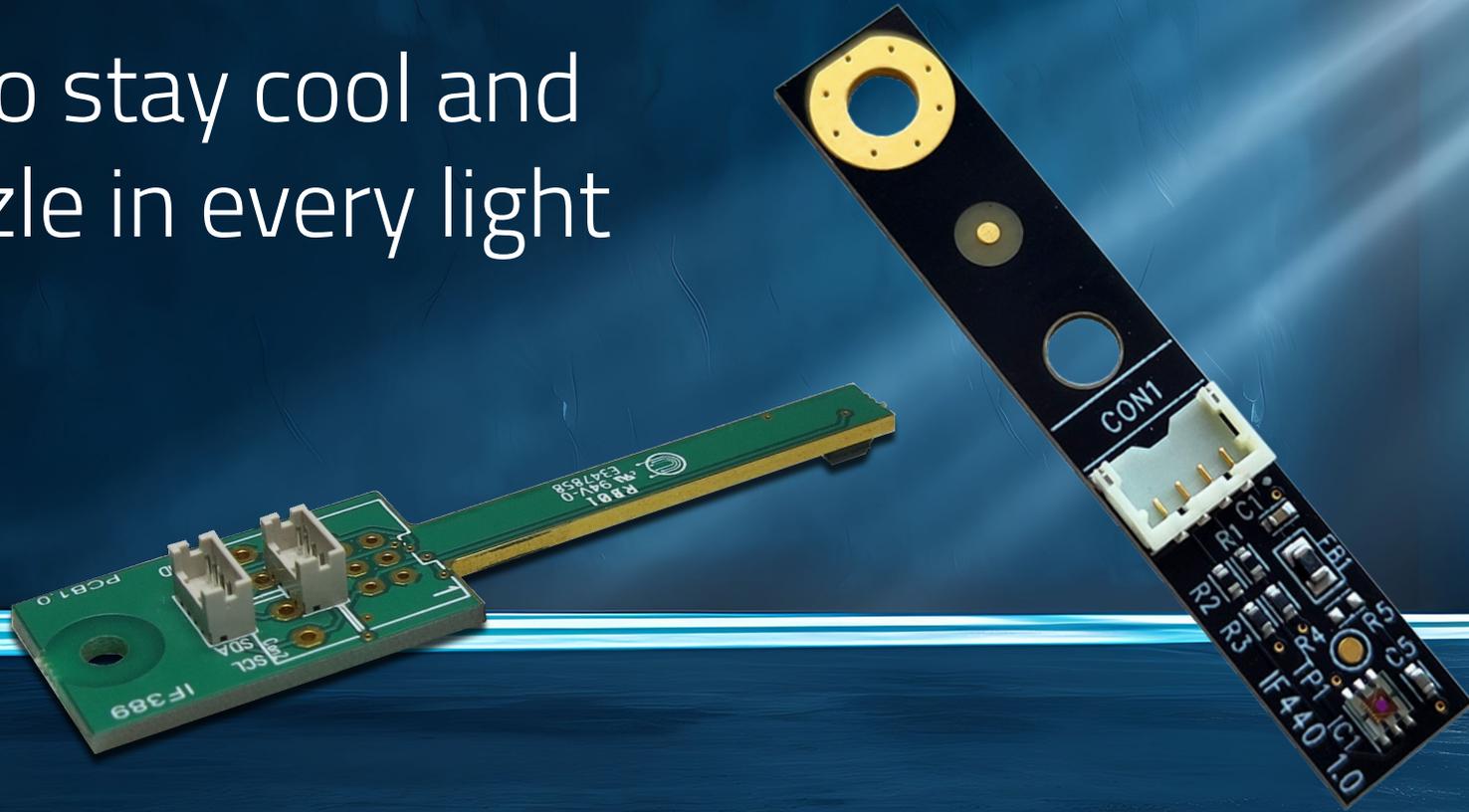


Tools to stay cool and  
to dazzle in every light



# **FORTEC** Ambient Light & Temperature Sensor GROUP

Sensors and Diagnostics

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One partner, unlimited technology solutions

# Cost Savings and Lifetime Extension for Your Display

## Sustainability

Save energy costs by equipping your Chandler-based A/D boards from FORTEC Integrated (PRISMA/ARTISTA) with the FORTEC Integrated **Light Sensor**.

Depending on the location, your devices spend more than 50% of the year under suboptimal **ambient light** conditions such as darkness, overcast skies, or rainy weather. Therefore fixed backlight settings either lead to increased energy consumption or insufficient display brightness in strong sunlight. **The Light Sensor** ensures optimal brightness performance in any environment and reduces energy costs by dimming the backlight at the right time.

Additionally, the FORTEC **Temperature Sensor** can be integrated into your boards to monitor the permissible operating temperature range and thus prevent damages to your displays. This results in lower investments in repairs or new displays due to an extended lifetime.



### Intelligent Brightness Control

Energy savings up to 56%

Assumption: Annual hours - 50% sunshine and 50% overcast during the day   50% at night	Fixed Operation	automatic Control
2.190 h/year	1000 nits 4,24 W <b>9,29 kWh</b>	1000 nits 4,24 W <b>9,29 kWh</b>
2.190 h/year	1000 nits 4,24 W <b>9,29 kWh</b>	550 nits 2,33 W <b>5,10 kWh</b>
4.380 h/year	1000 nits 4,24 W <b>18,58 kWh</b>	100 nits 0,42 W <b>1,86 kWh</b>
8.760 h/year	<b>37,16 kWh</b>	<b>16,25 kWh</b>
Savings per monitor per year		20,91 kWh
Savings per 1.000 monitors p.a. in 5 years		104,55 MWh

	Per Monitor	1000 Monitors
Savings Energy in 5 years in Euro*	<b>29,38 €</b>	<b>29,38 T€</b>
Reduction CO <sub>2</sub> e** in 5 years	<b>46,5 kg CO<sub>2</sub>e</b>	<b>46,525 t CO<sub>2</sub>e</b>
56% less energy   Increase in panel service life		

\* Electricity prices in Germany (source: ChatGPT): Green electricity on average: €292.30 per MWh, Mixed electricity prices fluctuate between €187 per MWh and €375 per MWh Current average: €281 per MWh Electricity (UBA) incl. upstream chains

\*\* CO<sub>2</sub> equivalents (CO<sub>2</sub>e) are a unit of measurement to standardise the climate impact of the different greenhouse gases.  
Data source: [Federal Environment Agency 2023](#)

Quelle: ChatGPT „Deep Research“

## Product Features IF 440



- Optimized curve to allow for a linear brightness change to the human eye
- Backlight is automatically controlled according to the surrounding light
- Improved readability by increased backlight brightness in bright environments & reduced light in darkness
- Management via OSD (curve, interval) & ChandlerRover
- Wide detection range from 0 to 65.535 lux
- Interface I2C (Power Supply: 1.7 to 3.6V)
- Plug & Play supported by standard FW

## Ambient Light Sensor

## Brightness Control

## Monitor Supervision

## Product Benefits IF 440



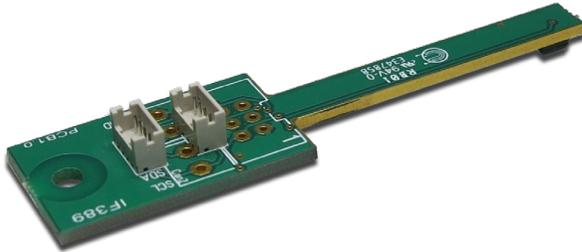
- Savings on energy costs by perfect backlight performance
- Usable in a wide range of applications
- Plug & Play installation, fully automatic operation
- Customized adjustment of brightness curve & control period via ChandlerRover
- Increases the interest of passers-by through better visibility
- Environmentally friendly because of lower power consumption



## Saving Costs

## Optimal Readability in every Light

## Product Features IF389



- Reduces backlight brightness if the temperature is too high
- Shut down if the temperature is too low
- Customized operating temperature limits via ChandlerRover Implemented hysteresis
- GPIOs to control fans or heaters
- Temperature control can be enabled & disabled via OSD
- Interface I2C (Power Supply: 1.7 to 3.6V)
- Plug & Play supported by standard FW

## Product Benefits IF 389

- Usable in a wide range of applications
- No damages in cold or hot areas
- Investment savings for repairs or new devices
- Define your own controlled temperature range via ChandlerRover
- Built-in shutdown function outside the operating temperature range limits
- No start of the panel outside the specified operating temperature to prevent hardware damage

## Temperature Sensor

## Temperature Control

## Monitor Supervision



## Longer Lifetime

## Minimization of Failures

Our company network supports you worldwide with branches in Germany, Austria, Switzerland, the UK and the USA.  
For further information, please contact us:

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