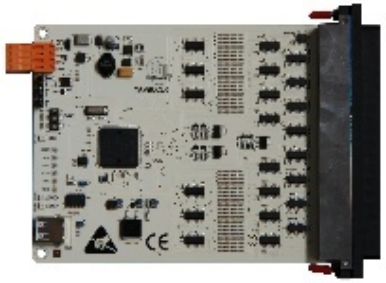
YAV90CLR

16 Channel Colorimeter for LED testing



Features

- Test up to 16 LEDs (Low to High Brightness) simultaneously
- Fiber optic input channels (POF)
- 1 optical calibration RGB LED output
- Wave lengh (420…650 nm) and luminance (Intensity) readout
- 24VDC single power supply
- OK/NOK comparator threshold settings
- CAN bus controlled
- Reliable VPC 90 series I/O connector

Applications

- LED testing in PCBs, traffic signals, automotive lights and automotive dashboards.
- Mobile appliances, projectors, LCDs, TFTs...

Specifications

Optical

Red Peak Efficiency Wavelength	610 nm
Green Peak Efficiency Wavelength	540 nm
Blue Peak Efficiency Wavelength	480 nm
White accuracy	x=+ 0,015, y=+ 0,015
Red accuracy	+ 4 nm
Green accuracy	+ 6 nm
Blue accuracy	+ 4 nm

Power supply

Operative voltage range	18..30VDC
Max. 24VDC current requirement	50mA
Maximum dissipation @ 25ºC	1,5W
Reference LEDs supplied current	18mA

Physical

I/O connector	VPC, 16 Position, 510104123
Optical Head fiber length	600mm
Fiber diameter	1mm
Optical Head diameter	5mm
Dimensions mm (HxL)	142x187

Environment

Operating temperature	-20..85ºC
Storage temperature	-20 to 70 °C
Relative humidity	10 to 90% relative humidity, noncondensing

Accessories

- P/N: YAV90CLR10
  5mm Optical head with 600mm POF and VPC contact.
- P/N: YAV90CLR20
  Optical Head mechanical trim and support

Overview

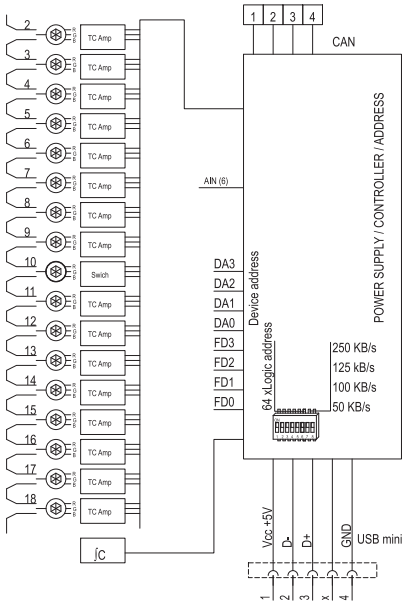
The YAV90CLR module is the most cost effective and accurate automatic LED testing device for both Brightness and Color. It has a calibrated RGB light source as a tool for colorimeter channels calibration or optical head dust detection.

Each optical head has an aspherical lense in order to correct the missalignements with the LED under test. A plastic optical fiber lead transfers the light to the ITA connector and the RGB matrix sensor via a temperature controlled (IR compensation) mirror chamber. It has a selectable setting for DC or PWM LED power supply.

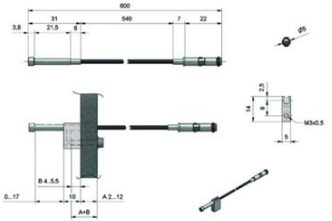
The incoming light data is processed in parallel and compared with the OK/NOK desired levels and the results are transferred to the test computer via CAN bus or USB.

The board uses 90 series connection modules and can operate stand alone or mounted on a standard Virginia Panel receiver.

The supply includes National Instruments LabView Software virtual panel and operating software for a true Plug & Play operation



YAV90CLR Pin Assignment



Optical Head (YAV90CLR10, YAV90CLR20)

YAV90CLR Software Virtual Panel

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