

TFE Datasheets

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Power Supply

- **COOLM 24V 4A Power Supply Adapter**
 - Product page: <https://a.co/d/hEB22qX>
- **CUI Inc PDQE20-Q24-S5-D DC-DC 24V-5V/4A Switching Power Supply**
 - Product page: <https://www.digikey.com/en/products/detail/cui-inc/PDQE20-Q24-S5-D/10230156>
 - Datasheet: <https://www.cui.com/product/resource/pdqe20-d.pdf>

Peripherals

Displays

- **128x64 Small Transflective Graphic LCD (U3)**
 - Product page: https://www.crystallfontz.com/product/cfag12864t3nfh-sunlight-readable-low-power-lcd?utm_source=Tutorial&utm_medium=post&utm_campaign=transparent
 - Datasheet (DIRECT DOWNLOAD): <https://www.crystallfontz.com/products/document/4113/CFAG12864T3-NFHData sheet.pdf>
 - **Breakout board** product page: <https://www.crystallfontz.com/product/cfa10110-lcd-breakout-board>
 - Breakout board datasheet (DIRECT DOWNLOAD): https://www.crystallfontz.com/products/document/4570/CFA10110_Datasheet.pdf
- **240x128 Low Power Graphic LCD Display**
 - Product Page: <https://www.crystallfontz.com/product/cfag240128u0tfh-240x128-low-power-graphic-lcd>
 - Datasheet (DIRECT DOWNLOAD): <https://www.crystallfontz.com/products/document/4855/CFAG240128U0FamilyD atasheet.pdf>
- **128x56 Transparent OLED Display (deprecated)**
 - Product page: <https://www.crystallfontz.com/product/cfal12856a00151b-128x56-transparent-oled-screen>
 - Datasheet (DIRECT DOWNLOAD): https://www.crystallfontz.com/products/document/4054/CFAL12856A0-0151-B_Datasheet.pdf
 - **Breakout board** datasheet (DIRECT DOWNLOAD): <https://www.crystallfontz.com/products/document/4253/CFA10105Datasheet.pdf>

LEDs

- **Cree LED Light Module (XP-E2, Neutral White 4000K; J006-CE2840-Q5)**
 - Product page: <https://www.ledsupply.com/cree-leds/centaurus-led-by-luxdrive>
 - Datasheet: https://www.ledsupply.com/content/pdf/leds-cree-xpe2_documentation.pdf
 - LuxDrive Centaurus J006 Datasheet: https://www.ledsupply.com/content/pdf/J006_2019_v1-0f.pdf
- **CREE XREWHT-L1-0000-007F5 (Cree XRE Neutral White LED) (deprecated)**
 - Product page: <https://www.mouser.com/ProductDetail/Cree-LED/XREWHT-L1-0000-007F5?qs=y%252BJdrdj3vZqnFnFyk3xtig%3D%3D>
 - Datasheet: <https://www.mouser.com/datasheet/2/90/XLamp7090XRE-275328.pdf>

Sensors

- **DHT-22 Temp/Humidity Sensor**
 - <https://cdn-shop.adafruit.com/datasheets/DHT22.pdf>

Cameras

- **Baumer Industrial camera** / HX series: **HXG20NIR**
 - Datasheet:
https://www.baumer.com/medias/_secure_/Baumer_UsersGuide-HXG-R2-v17_EN_20170522_MNL.pdf?mediaPK=9001036185630
 - Tripod: [Mounting Adapter Type B \(Tripod\) \(Article no.: 11003060\)](#)
- **Allied Vision Technologies GC1290**
 - Product page: <https://www.alliedvision.com/en/camera-selector/detail/prosilica-gc/1290/>
 - SDK download: <https://www.alliedvision.com/en/products/vimba-sdk/#c1497>
 - User guide:
https://cdn.alliedvision.com/fileadmin/content/documents/products/cameras/Prosilica_GC/techman/Prosilica_GC_TechMan.pdf
 - SKIP TO PAGE 18 FOR CONTENTS
 - PAGE 57 FOR GC1290 SPECS
 - Tripod: Allied Vision 02-5002A
- **8-50mm Arducam Lens**
 - Amazon product page: <https://a.co/d/5H1jclC>

Raspberry Pi

Raspberry Pi Model B 4GB

- Documentation page: <https://www.raspberrypi.com/documentation/>
 - Raspberry Pi 4 Model B datasheet:
<https://datasheets.raspberrypi.com/rpi4/raspberry-pi-4-datasheet.pdf>
- Mechanical Drawing:
<https://datasheets.raspberrypi.com/rpi4/raspberry-pi-4-mechanical-drawing.pdf>
- Schematic: <https://datasheets.raspberrypi.com/rpi4/raspberry-pi-4-reduced-schematics.pdf>

Electronics

- **MMBT2222ALT1G** (BJT for LED driver)
 - Product page: <https://www.digikey.com/en/products/detail/onsemi/MMBT2222ALT1G/919593>
 - Datasheet: <https://www.onsemi.com/pdf/datasheet/mmbt2222lt1-d.pdf>
- **IRLML6246TRPBF** (MOSFET for LED driver) (**deprecated**)
 - Product page: <https://www.digikey.com/en/products/detail/infineon-technologies/IRLML6246TRPBF/2393874>
 - Datasheet: <https://www.infineon.com/dgdl/irlml6246pbf.pdf?fileId=5546d462533600a40153566878f22621>

Case

- Enclosure: <https://a.co/d/83yMwxc>
 - Quantity: 1
- Rubber feet: <https://a.co/d/f4TSLc>
 - Quantity: 1 x 4pcs
- LED mounts: <https://a.co/d/i0tSRIp>
 - Quantity: 1 x 10 pcs
- Camera mounts: <https://a.co/d/9SwjgOT>
 - Quantity:
 - Mounting plate:
 - <https://www.edmundoptics.com/p/frac14-20-mounting-plate-for-prosilica-cameras/18044/>