

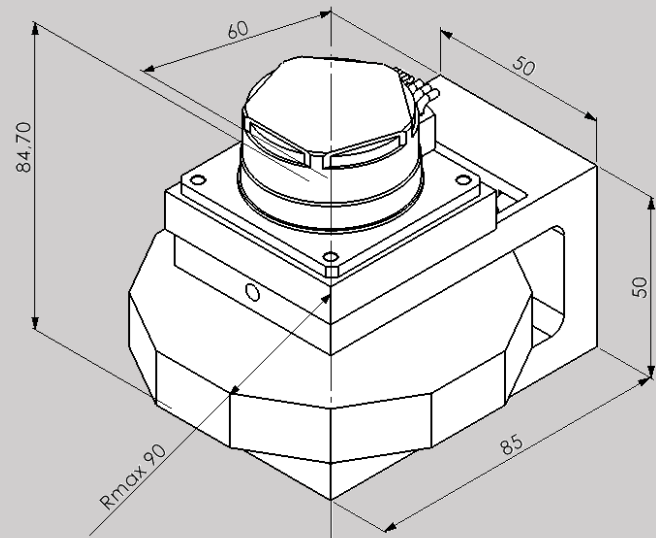
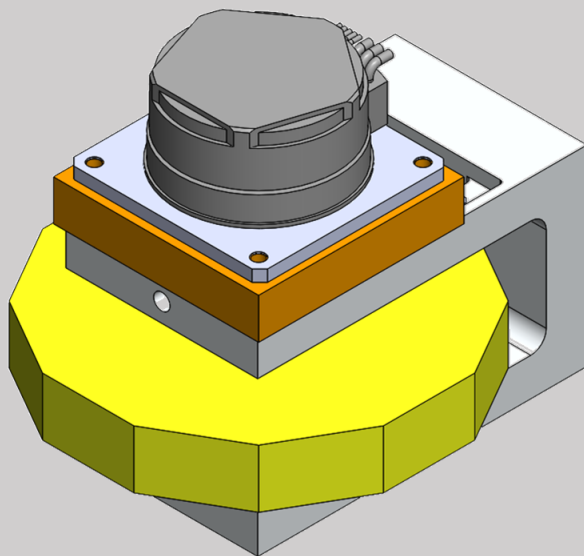
# Polygon mirror scanner PM unit



5,000 or 10,000 rpm

up to 20 mm aperture

individual facets



## Specs

### General specifications

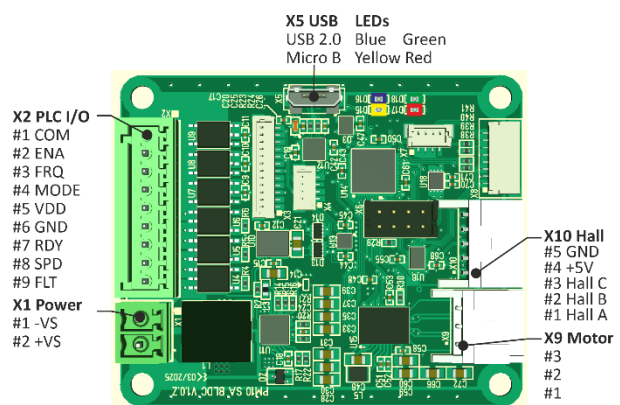
|                                |              |                               |
|--------------------------------|--------------|-------------------------------|
| Power supply<br>(connector X1) | Voltage      | 12 - 36 V <sub>DC</sub> , GND |
|                                | Power        | max. 100 W                    |
|                                | Current      | max. 5 A                      |
|                                | Ripple/Noise | max.200 mVpp                  |
| Operating temperature          |              | +18...+30°C                   |
| Humidity                       |              | 20...90 % rel.H.              |
| Wight                          |              | approx. 1 kg                  |
| Size (LxWxH)                   |              | 110 x 90 x 85                 |

### Interface

|                     |                |                 |
|---------------------|----------------|-----------------|
| Mechanical          | On bottom side | 4x M5 threaded  |
| Data                | PLC            | or custom       |
| <b>Command IN</b>   | opto-coupler   | max 2 mA        |
|                     | 5 to 24 V      | max 5 MHz       |
| Enable              | ENA            | Enable on HIGH  |
| Speed               | FRQ            | PWM             |
| Mode                | MODE           | Tbd             |
| <b>Feedback OUT</b> | opto-coupler   | max 50 mA       |
|                     | 5 to 24 V      | max 10 MHz      |
| Speed constant      | RDY            | HIGH if const.  |
| Speed feedback      | SPD            | FREQ – feedback |
| Fault signal        | nFAULT         | LOW in fault    |

### Optical specifications

|               |                               |
|---------------|-------------------------------|
| Facets        | Individual number             |
| Max. RPM      | 5,000 or 10,000 rpm           |
| Max. Lines/s  | RPM / 60 x FACETS             |
| Coating       | On request (UV, VIS, NIR, IR) |
| Free Aperture | up to 20 mm                   |
| Max. Diameter | 90 mm                         |



IN signals are opto-coupled against COM, while OUT signals operate on VDD and GND in connector X2.

| LEDs     | Green                    | Blue      | Yellow       | Red            |
|----------|--------------------------|-----------|--------------|----------------|
| ON       | Power OK                 |           | RPM constant | ERROR turn off |
| Blinking | Motor driver power fault | USB comm. | RPM changing | Overtemp.      |

The PM-unit can be equipped with an encoder for high precision operation on request.