

# EXSS-135-30X

## Gimbal System with FULL HD Daylight Camera with 30x Optical Zoom

### Characteristics

|                                |  |
|--------------------------------|--|
| Gimbal system                  | 2 axis gimbal with high bandwidth direct torque drive  |
| Daylight video camera *        | PANASONIC GP-MH330   |
| Daylight camera field of view  | horizontal – 65.1° to 2.3° vertical – 38.4° to 1.4°  |
| Minimum illumination           | 0.4 lx (color), 0.03 lx (B/W)  |
| Pan/Tilt range                 | Unlimited – slip ring on both axes   |
| Maximum slew rate              | Up to 300 °/sec  |
| Feedback position resolution * | 0.072° or 1.25 mRad  |
| De-stabilization               | Less than 50 uRad (1 $\sigma$ )  |
| Control interface              | 1x RS232, 1x auxiliary RS232, up to 3x GPIO with 3.3V levels for external devices control, like video switching, gimbal deployment mechanics control, etc. |
| Video output                   | Daylight camera – 1x component Y Pb Pr up to 1080i or ITU472-3 (PAL)Signal is available on the external connector (i.e. no video switching inside gimbal)  |
| Weight                         | 1.5 kg   |
| Working voltage                | 24-30 V  |
| Power                          | Less than 20 W   |
| Control interface              | RS232, 115200 bps, 8N1, proprietary binary protocol  |
| External connector *           | PC10TB, or customized  |

\*This can be customized according customer specification.

## Description

EXSS -135\_30X is a gyro stabilized gimbal system, containing FULL HD daylight camera with 30x optical zoom. It is a special version of EXSS -135 gimbal, with lower de-stabilization value, but without IR imager. 2 axis gyro stabilized gimbal is specially developed for applications on different kind of unmanned aerial vehicles, with fixed or rotary wing. All control electronics, required for gimbal operation, is fit inside the unit shell. Platform is controlled by high bandwidth, purpose built coreless direct torque motors, with gearless drive, which allow to achieve very low de-stabilization, required for embedded optical sensors operation, enabling good and stable image quality even at maximum optical zoom value.

