

## Hardware Specifications for UGR86



### GPS Module Specifications

|                                                  |                                        |
|--------------------------------------------------|----------------------------------------|
| <b>GPS L1 Band Receiver</b>                      | 1575.42MHz                             |
| <b>Channels</b>                                  | 22 (Tracking) / 66 (Acquisition)       |
| <b>Horizontal Position Accuracy (autonomous)</b> | <2.5 m CEP-103dBm                      |
| <b>Velocity Accuracy (without aid)</b>           | <0.1m/s                                |
| <b>Acceleration Accuracy (without aid)</b>       | 0.1 m/s <sup>2</sup>                   |
| <b>Timing Accuracy (1 PPS out)</b>               | <15 ns with Pulse width 100ms          |
| <b>Environmental</b>                             |                                        |
| <b>Operating Temperature</b>                     | -40 <sup>0</sup> to +85 <sup>0</sup> C |
| <b>Storage Temperature</b>                       | -45 <sup>0</sup> to +125 <sup>0</sup>  |
| <b>Cold Start</b>                                | C <35s                                 |
| <b>Warm Start</b>                                | <30s                                   |
| <b>Hot Start</b>                                 | <1s                                    |
| <b>Sensitivity</b>                               |                                        |
| <b>Acquisition</b>                               | -159dBm                                |
| <b>Tracking</b>                                  | -165dBm                                |
| <b>Reacquisition</b>                             | -160dBm                                |

GPS Chipset - Chipset Media Tek

### Other Hardware Specifications

|                         |                                                              |
|-------------------------|--------------------------------------------------------------|
| <b>Interface</b>        | USB 2.0<br>External Antenna (optional)                       |
| <b>Antenna</b>          | Recommended antenna<br>AA.107.301111 with 3M<br>cable length |
| <b>Internal Battery</b> | 3.7 v 1100mAh LI-ION                                         |
| Battery (optional)      |                                                              |
| <b>LED's</b>            | Yellow – GPS<br>Green – PC connection                        |
| <b>Voltage</b>          | 3.5V – 6.5 V                                                 |
| <b>Current Draw</b>     | 55- 80mA                                                     |
| <b>Dimensions</b>       | 79mm x 48mm x 28mm (L, B, H)                                 |