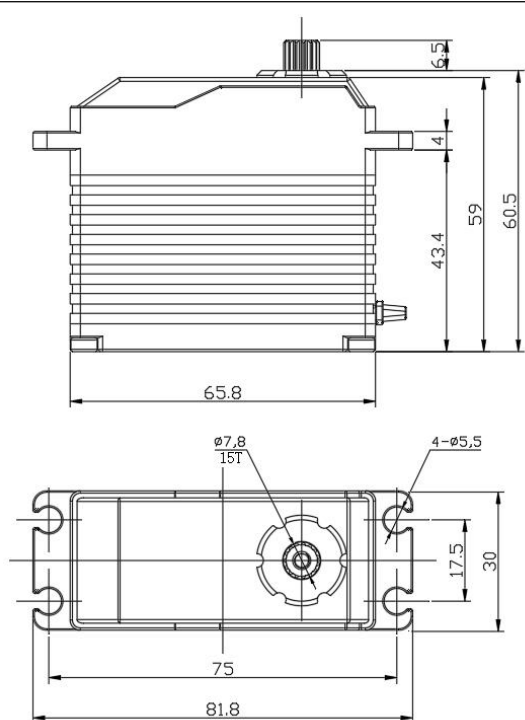


# PRODUCT SPECIFICATION

## RS1280BLW

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                        |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Control System</b>        | Pulse width modulation control                                                                                                                                                                                                                                                                                                                                                                                                         |  |                                                                                                                                        |
| <b>Refresh Rate</b>          | 333Hz                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                        |
| <b>Neutral Position</b>      | 1520uS                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                                                        |
| <b>Signal Mode</b>           | Digital                                                                                                                                                                                                                                                                                                                                                                                                                                |  |                                                                                                                                        |
| <b>Dead band</b>             | 2 uSec                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                                                        |
| <b>Operating Voltage</b>     | 7.4V ~ 16.8V                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                                                                                                        |
| <b>Operating Temperature</b> | -15C°~ +70C°                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                                                                                                        |
| <b>Bearing</b>               | Five Ball Bearings                                                                                                                                                                                                                                                                                                                                                                                                                     |  |                                                                                                                                        |
| <b>Mechanical Angle</b>      | No Limit                                                                                                                                                                                                                                                                                                                                                                                                                               |  |                                                                                                                                        |
| <b>Size</b>                  | 65.8*30.0*59.0mm                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                        |
| <b>Net Weight</b>            | 284.3g                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                                                        |
| <b>Wire</b>                  | TYU+JST 300mm / 22AWG                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                        |
| <b>Operating Travel</b>      | 180° ± 10°                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                                        |
| <b>Signal Range</b>          | 500 to 2500 uSec                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                                                                                        |
| <b>Stall Torque</b>          | 78.0 kg-cm (1084 oz-in) @ 10.0V<br>83.0 kg-cm (1153 oz-in) @ 11.1V<br>92.0 kg-cm (1278 oz-in) @ 12.0V<br>110.0 kg-cm (1528 oz-in) @ 14.4V<br>125.0 kg-cm (1736 oz-in) @ 16.0V<br>128.0 kg-cm (1779 oz-in) @ 16.8V                                                                                                                                                                                                                      |  |                                                      |
| <b>Operating Speed</b>       | 0.120 sec/60° @ 10.0V<br>0.110 sec/60° @ 11.1V<br>0.100 sec/60° @ 12.0V<br>0.090 sec/60° @ 14.4V<br>0.080 sec/60° @ 16.0V<br>0.077 sec/60° @ 16.8V                                                                                                                                                                                                                                                                                     |  | <b>Unload Current</b><br>950 mA @ 10.0V<br>1000 mA @ 11.1V<br>1060 mA @ 12.0V<br>1200 mA @ 14.4V<br>1300 mA @ 16.0V<br>1400 mA @ 16.8V |
| <b>Direction</b>             | <input checked="" type="checkbox"/> CCW <input type="checkbox"/> CW                                                                                                                                                                                                                                                                                                                                                                    |  |                                                                                                                                        |
| <b>Waterproof Level</b>      | <input type="checkbox"/> IP65 <input checked="" type="checkbox"/> IP67                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                                                                                        |
| <b>Servo Mode</b>            | <input checked="" type="checkbox"/> Regular Servo <input type="checkbox"/> Servo Winch <input type="checkbox"/> Multiple-Rotation Servo                                                                                                                                                                                                                                                                                                |  |                                                                                                                                        |
| <b>Angle Sensor</b>          | <input type="checkbox"/> Potentiometer <input checked="" type="checkbox"/> Magnet Angle Sensor                                                                                                                                                                                                                                                                                                                                         |  |                                                                                                                                        |
| <b>Motor Type</b>            | <input checked="" type="checkbox"/> Brushless <input type="checkbox"/> Coreless <input type="checkbox"/> DC                                                                                                                                                                                                                                                                                                                            |  |                                                                                                                                        |
| <b>Motor Drive</b>           | <input checked="" type="checkbox"/> FET Drive <input type="checkbox"/> IC Drive <input type="checkbox"/> Transistor Drive                                                                                                                                                                                                                                                                                                              |  |                                                                                                                                        |
| <b>Programmable</b>          | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                                                                                                                                                                                                                    |  |                                                                                                                                        |
| <b>Gear Material</b>         | <input checked="" type="checkbox"/> Strength Steel <input type="checkbox"/> Titanium <input type="checkbox"/> Copper <input type="checkbox"/> Plastic                                                                                                                                                                                                                                                                                  |  |                                                                                                                                        |
| <b>Horn Gear Spline</b>      | <input type="checkbox"/> 25T-ø5.92mm <input type="checkbox"/> 25T-ø4.94mm <input checked="" type="checkbox"/> Other 15T-ø7.8mm                                                                                                                                                                                                                                                                                                         |  |                                                                                                                                        |
| <b>Case Material</b>         | <input checked="" type="checkbox"/> AL6061T6 <input type="checkbox"/> AL+Plastic <input type="checkbox"/> Plastic                                                                                                                                                                                                                                                                                                                      |  |                                                                                                                                        |
| <b>Bearing Material</b>      | <input checked="" type="checkbox"/> Metal <input type="checkbox"/> Plastic                                                                                                                                                                                                                                                                                                                                                             |  |                                                                                                                                        |
| <b>Horn Accessories</b>      | <input checked="" type="checkbox"/> AL7075T6 <input type="checkbox"/> Plastic                                                                                                                                                                                                                                                                                                                                                          |  |                                                                                                                                        |
| <b>Wire Color</b>            | Battery Negative: <input checked="" type="checkbox"/> Black <input type="checkbox"/> Brown<br>Battery Positive: <input type="checkbox"/> Black <input checked="" type="checkbox"/> Red<br>Signal: <input checked="" type="checkbox"/> Grey <input type="checkbox"/> White <input type="checkbox"/> Orange<br>Signal Negative: <input checked="" type="checkbox"/> Black <input type="checkbox"/> White <input type="checkbox"/> Orange |  |                                                                                                                                        |