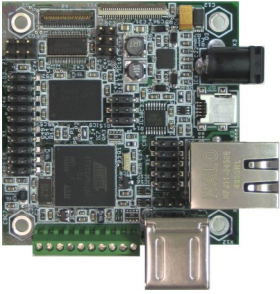




## Industrial Robot Controllers



BiPOM offers a wide range of microcontroller boards, peripherals, sensors and high current motor controllers to build robots of all sizes.

Our ARM9 boards running Linux ( Debian ) allow standard USB peripherals such as GSM modems, Wi-Fi, Bluetooth, GPS and Webcam for building location-aware, remote-controlled robots.

### MINI-MAX/ARM9260-E

The ultimate mobile robot controller at with Linux on a tiny board.

(please see [Microcontroller Boards](#))

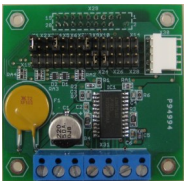


### VBL/HBL2300 Family :

High-Power, dual-channel Brushless DC Motor Controllers. Ideal for robotics applications.

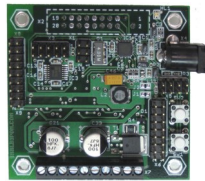
## DC Motor Controllers

### MOTOR-1B



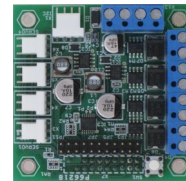
Universal Stepper motor controller board.

### MOTOR-2



Controls two stepping motors up to 2.5 A

### HCD-4



4-channel high current driver peripheral board. Also 4 servo motor outputs.

## Roboteq Brushed DC Motor Controllers

**HDC/XDCXXXX Family:** High Power Dual Channel, Brushed DC Motor Controllers. Advanced Roboteq Core Technology, multipleConnectivity options and Scripting support. Up to 2 x 150A and several voltage options up to 96V. Available in single channel configuration up to 300A. Built in extruded aluminum case. Targetted at high power mobile robots and small electric vehicles.

Model	Description	Model	Description
HDC2430	2 x 150A, 30V, USB, CAN, 19 Dig/Ana IO, Heatsink enclosure	HDC2450	2 x 150A, 50V, USB, CAN, 19 Dig/Ana IO, Heatsink enclosure
HDC2430S	1 x 300A, 30V, USB, CAN, 19 Dig/Ana IO, Heatsink enclosure	HDC2450S	1 x 300A, 50V, USB, CAN, 19 Dig/Ana IO, Heatsink enclosure
HDC2460	2 x 150A, 60V, USB, CAN, 19 Dig/Ana IO, Heatsink enclosure	XDC2460	2 x 150A, 60V, USB, CAN, 8 Dig/Ana IO, Heatsink enclosure
HDC2460S	1 x 300A, 60V, USB, CAN, 19 Dig/Ana IO, Heatsink enclosure	XDC2460S	1 x 300A, 60V, USB, CAN, 8 Dig/Ana IO, Heatsink enclosure
XDC2430	2 x 150A, 30V, USB, CAN, 8 Dig/Ana IO, Heatsink enclosure		



**FDC32xx Family :** Medium Power Triple Channel, Brushed DC Motor Controllers. Advanced 32-bit technology, multiple connectivity options and scripting support. Up to 3 x 60A. Plastic enclosure with bottom conduction plate. Targetted at motion simulators and industrial automation.

Model	Description
FDC3260	Triple Channel Brushed, 3 x 60A, Conduction Plate, Encoder Inputs, USB, CAN



**MDCxxxx Family :** Medium Power Single or Dual Channel, Brushed DC Motor Controllers. Advanced 32-bit technology, multiple connectivity options and scripting support. Up to 2 x 60A or 1 x 120A. Several voltage options up to 60V. Plastic enclosure with bottom conduction plate. Targetted at robotics, machine control and automation.

Model	Description
MDC1230	Enclosed, Single Channel, Brushed, 1 x 80A, 30V, Conduction Plate, Encoder Inputs, USB
MDC1460	Enclosed, Single Channel, Brushed, 1 x 120A, 60V, Conduction Plate, Encoder Inputs, USB
MDC2230	Enclosed, Dual Channel, Brushed, 2 x 60A, 30V, Conduction Plate, Encoder Inputs, USB
MDC2460	Enclosed, Dual Channel, Brushed, 2 x 60A, 60V, Conduction Plate, Encoder Inputs, USB





## Roboteq Brushed DC Motor Controllers

**SDC21xx Family** : Low Power Single or Dual Channel, Brushed DC Motor Controllers. Advanced 32-bit technology, multiple connectivity options and scripting support. Up to 2 x 20A or 1 x 40A. Several voltage options up to 60V. Open frame with bottom conduction plate. Targeted at robotics, machine control and automation. .

Model	Description
<b>SDC2130</b>	Miniature, Dual Channel, Brushed, 2 x 20A, 30V, Encoder, USB
<b>SDC2130S</b>	Miniature, Single Channel, Brushed, 1 x 40A, 30V, Encoder, USB
<b>SDC2160</b>	Miniature, Dual Channel, Brushed, 2 x 20A, 60V, Encoder, USB
<b>SDC2160S</b>	Miniature, Single Channel, Brushed, 1 x 40A, 60V, Encoder, USB
<b>SDC3260</b>	Triple Channel, 3 x 20A, 60V, USB, CAN, 14 Dig/Ana IO, Cooling plate with ABS cover



**RGDC1xxx Family**: Very High Power Single Channel, Feature Packed Brushed DC Motor Controllers. Advanced 32-bit technology, multiple connectivity options and scripting support. Up to 500 A. Several voltage options up to 100V. Heavy conduction cooling plate with ABS Plastic cover. Targeted at electric vehicles, personnel carriers, golf cars, materials handling equipment, electric boats, automated guided vehicles, agricultural robots and other high power applications.

Model	Description
<b>RGDC1860</b>	Single Channel, 1 x 500A, 60V, USB, CAN, 16 Dig/Ana IO, Cooling plate with ABS cover
<b>RGDC1896</b>	Single Channel, 1 x 500A, 96V, USB, CAN, 16 Dig/Ana IO, Cooling plate with ABS cover



## Roboteq Brushless DC Motor Controllers

**HBLxxxx Family** : High Power Single Channel, **Brushless** DC Motor Controllers. Advanced 32-bit technology, multiple connectivity options and scripting support. Up to 2 x 75A or 1 x 150A. voltage options up to 96V. Several voltage options up to 96V. Built in extruded aluminum case. Targeted at small electric vehicles, pump control and other high power applications.

Model	Description	Model	Description
<b>HBL1630</b>	150A, 30V, USB, CAN, Trapezoidal, 8 Dig/Ana IO, Heatsink	<b>HBL2330</b>	2 x 75A, 30V, USB, CAN, Trapezoidal, 19 Dig/Ana IO, Heatsink
<b>HBL1660</b>	150A, 60V, USB, CAN, Trapezoidal, 8 Dig/Ana IO, Heatsink	<b>HBL2360</b>	2 x 75A, 60V, USB, CAN, Trapezoidal, 19 Dig/Ana IO, Heatsink
<b>HBL1696</b>	150A, 96V, USB, CAN, Trapezoidal, 8 Dig/Ana IO, Heatsink	<b>HBL2396</b>	2 x 75A, 96V, USB, CAN, Trapezoidal, 19 Dig/Ana IO, Heatsink



**FBL23xx Family**: Medium Power Dual Channel, **Brushless** DC Motor Controllers. Advanced 32-bit technology, multiple connectivity options and scripting support. Up to 2 x 60A. Plastic enclosure with bottom conduction plate. Targeted at AGV and small electric vehicles.

Model	Description
<b>FBL2360</b>	Dual Channel, 2 x 60A, 60V, USB, CAN, Trapezoidal/Sinusoidal, FOC, 14 Dig/Ana IO, Cooling plate with ABS cover
<b>FBL2360S</b>	Single Channel 120A, 60V, USB, CAN, Trapezoidal/Sinusoidal, FOC, 14 Dig/Ana IO, Cooling plate with ABS cover
<b>FBL2360A</b>	Dual Channel, 2 x 60A, 60V, USB, CAN, Trapezoidal/Sinusoidal, FOC, 14 Dig/Ana IO, Resolver/SSI, Cooling plate, ABS cover
<b>FBL2360AS</b>	Single Channel 120A, 60V, USB, CAN, Trapezoidal/Sinusoidal, FOC, 14 Dig/Ana IO, Resolver/SSI, Cooling plate, ABS cover



**MBL1xxxx Family** : Medium Power Single Channel, **Brushless** DC Motor Controllers. Advanced 32-bit technology, multiple connectivity options and scripting support. Up to 75A. Several voltage options up to 60V. Plastic enclosure with bottom conduction plate. Targeted at machine control and robotics.

Model	Description
<b>MBL1330</b>	Single Channel, Brushless, 75A, 30V, Conduction Plate, Encoder, Hall Sensor, USB, Enclosed
<b>MBL1330A</b>	Single Channel, Brushless, 75A, 30V, Conduction Plate, Encoder, USB, Sensorless, Enclosed
<b>MBL1660</b>	Single Channel, Brushless, 120A, 60V, Conduction Plate, Encoder, Hall Sensor, USB, CAN Enclosed
<b>MBL1660A</b>	Single Channel, Brushless, 120A, 60V, Conduction Plate, Encoder, Sensorless, USB, CAN Enclosed



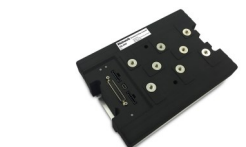
**SBL13xx/23xx Family** : Low Power and Compact size **Brushless** DC Motor Controllers. Single or Dual Channel. Advanced Roboteq Core Technology, multiple Connectivity options and Scripting support. Up to 30A and 60V. Bottom conduction plate. Targeted at machine control and robotics.

Model	Description
<b>SBL1330</b>	Single Channel, 30A, 30V, USB, CAN, Trapezoidal, 8 Dig/Ana IO, Cooling plate
<b>SBL1360</b>	Single Channel, 30A, 60V, USB, CAN, Trapezoidal, 8 Dig/Ana IO, Cooling plate
<b>SBL2330</b>	Dual Channel, 2 x 30A, 30V, USB, CAN, Trapezoidal/Sinusoidal, FOC, 14 Dig/Ana IO, Cooling plate
<b>SBL2360</b>	Dual Channel, 2 x 30A, 60V, USB, CAN, Trapezoidal/Sinusoidal, FOC, 14 Dig/Ana IO, Cooling plate
<b>SBL2360S</b>	Single Channel, 60A, 60V, USB, CAN, Trapezoidal/Sinusoidal, FOC, 14 Dig/Ana IO, Cooling plate



**GBL26xx Family** : High Power Dual Channel, **Brushless** DC Motor Controllers. Advanced 32-bit technology, multiple connectivity options and scripting support. Up to 2 x 180A. Plastic enclosure with bottom conduction plate. Targeted at heavy AGVs and mid-size electric vehicles.

Model	Description
<b>GBL2660</b>	2 x 180A, 60V, Hall sensors input, Encoder input, USB, CAN, no Ethernet
<b>GBL2660E</b>	2 x 180A, 60V, Hall sensors input, Encoder input, USB, CAN, Ethernet
<b>GBL2660S</b>	1 x 360A, 60V, Hall sensors input, Encoder input, USB, CAN, no Ethernet
<b>GBL2660SE</b>	1 x 360A, 60V, Hall sensors input, Encoder input, USB, CAN, Ethernet





## Roboteq Brushless DC Motor Controllers

**RGBL1xxx Family:** Very High Power Single Channel, Feature Packed **Brushless** DC Motor Controllers. Advanced Roboteq Core Technology, multiple Connectivity options and Scripting support. Up to 500 A. Several voltage options up to 96V. Heavy conduction cooling plate with ABS Plastic cover. Targeted at electric vehicles, personnel carriers, golf cars, materials handling equipment, electric boats, automated guided vehicles, agricultural robots and other high power applications. Support



Model	Description
<b>RGBL1860</b>	1 x 400A, 60V, USB, CAN, Trapezoidal/Sinusoidal, FOC, up to 16 Dig/Ana IO, Cooling plate with ABS cover
<b>RGBL1896</b>	1 x 300A, 96V, USB, CAN, Trapezoidal/Sinusoidal, FOC, up to 16 Dig/Ana IO, Cooling plate with ABS cover

## Roboteq AC Induction Motor Controllers

**FIM23xx Family:** Medium Power Dual Channel, AC Induction Motor Controllers. Advanced 32-bit technology, multiple connectivity options and scripting support. Up to 2 x 60A. Conduction cooling plate with ABS Plastic cover. Targeted at AGV and small electric vehicles.



Model	Description
<b>FIM2360</b>	Dual Channel, 2 x 60A, 60V, Encoder input, USB, CAN, 14 Dig/Ana IO, Cooling plate with ABS cover
<b>FIM2360S</b>	Single Channel, 1 x 120A, 60V, Encoder input, USB, CAN, 14 Dig/Ana IO, Cooling plate with ABS cover

**HIM23xx Family:** Medium Power Dual Channel, AC Induction Motor Controllers. Advanced 32-bit technology, multiple connectivity options and scripting support. Up to 1 x 150A or 2 x 75A. Built in extruded aluminum case. Targeted at mobile robots and small electric vehicles.



Model	Description
<b>HIM2360</b>	Dual Channel, 2 x 75A, 60V, Encoder input, USB, CAN, 14 Dig/Ana IO, Heatsink enclosure

**RGIM1xxx Family:** Very High Power Single Channel, Feature Packed AC Induction Motor Controllers. Advanced 32-bit technology, multiple connectivity options and scripting support. Up to 500 A. Several voltage options up to 96V. Heavy conduction cooling plate with ABS Plastic cover. Targeted at electric vehicles, personnel carriers, golf cars, materials handling equipment, electric boats, automated guided vehicles, agricultural robots and other high power applications.



Model	Description
<b>RGIM1860</b>	Single Channel, 500A, 60V, Encoder input, CAN, 16 Dig/Ana IO, Cooling plate and ABS cover
<b>RGIM1896</b>	Single Channel, 300A, 96V, Encoder input, CAN, 16 Dig/Ana IO, Cooling plate and ABS cover

## Magnetic Guide Sensors



**MGS1600 Family :** Precision magnetic sensor for detecting and measuring the position of a magnetic track along the horizontal axis, for use in Automatic Guided Vehicles and other Automation applications.



Model	Description
<b>MGSW1600</b>	All-metal, shock-resistant 160 mm wide magnetic track sensor with 3-axis Gyroscope, serial, USB, analog, PWM and CAN output.
<b>MGS1600GY</b>	Enclosed IP64 160 mm wide magnetic track sensor with 3-axis Gyroscope, serial, USB, analog, PWM and CAN output.

**Magnetic Tape:** Flexible magnetic tape with high-bond adhesive for laying magnetic tracks.  
MTAPE NORTH TOP25, MTAPE25NR, MTAPE SQUARE 5X5, MAGMARKER25, MTAPE NORTH TOP50, MTAPE50NR