

Biclops PT (Rev I) Specifications

Parameter	Value			Units	Notes
	Min	Typ	Max		
Physical Aspects					
Height		6		inches	actual height 6.002" (152.44mm)
Width		4		inches	tube and base flange, screw heads extend beyond this
Depth		4.72		inches	maximum extent from front to tip of on/off switch
Tilt axis height		4.75		inches	axis center above mounting surface
Weight		1.04		kilograms	
Color		Blue			Pantone 286, other colors available with volume orders
mount					1/4-20 x3/16DP or 4 #6 screws on 3.25" grid
Environmental Ratings					
Operating temperature	-40		85	Celcius	
Weatherization	IP-60	IP-60	IP-64		per IEC 529, dust tight, IP-64 rating is optional
Performance					
Tilt range	±60	±60	±90	degrees	max range available by removing tilt limit screw
Pan range		±180		degrees	
Load Mass			4	kg	
Output torque			1.3(.95)	N-m(ft-lb)	
Angular velocity			170	deg/sec	
Angular acceleration			3000	deg/sec ²	unloaded
Angular resolution		1.08		arc-min	20000 encoder counts/revolution (higher resolutions available)
Angular accuracy		±½		encoder count	after calibration by customer-run application
Power Requirements					
Voltage	9	24	36	volts	regulated or unregulated DC
Power	1.5	10	20	watts	
Camera/sensor mounting					
monocular mount (-M)					See options below for details. Mounts may be removed for
stereo mount (-S)					attaching loads
Communication					
RS-232	9600		115.2k	baud	default is 9600 8-N-1
USB 2.0 full speed	9600		416k	bps	uses virtual serial port driver on PC
Protocol					binary format
Software					C++ API on Linux or MS Windows 2000/XP, source code included
Connectors					
RS-232					DB-9 female on 24" cable
USB					USB Type A on 1m cable
Power					Switchcraft EN3P4M weathertight connector (mates with EN3C4F)
Communication					Switchcraft EN3P6M weathertight connector (mates with EN3C6F)
Available options				Option ID	append optional features to end, e.g. PT-MW for monocular mount with weatherization
monocular mount				M	provides one centrally located countersunk 1/4-20 pass through hole and a threaded 4-40 hole for anti-rotation pin. Includes one 1/4-20 x 3/8" load screw and one 4-40 x 1/4" screw. This option is included with basic unit.
stereo mount				S	Same as -M option, but with additional mounting pairs at 4, 5, 6, and 7-inch separation. Includes two 1/4-20 x 3/8" load screws and two 4-40 x 1/4" anti-rotation screws.
Weatherization				W	sealed to IP64 rating
roll axis				R	specify model PTR instead of PT
orientation sensor				O	internal 2-axis attitude sensor aligned with base
custom internal signal routing				I	routing of up to 12 signals through pan axis to reduce wiring difficulties. Uses Hirose HR10A connectors. Provides 8 analog inputs to connector on back of tilt axis (6 inputs with -O option). May be combined with -I option. Consult factory for details
Analog Input connector				A	
Accessories					
international power supply				PS	110-220AC in, 24V@0.83A DC out
Additional power connector				PSC	Switchcraft EN3C4F