





DEMANDING WELDING

PROCESSES



Value in Sight

ArcLessVision revolutionizes welding visibility

See welding details for the first time.

Analyze real-time data with precision.

Make confident decisions instantly.



TIG



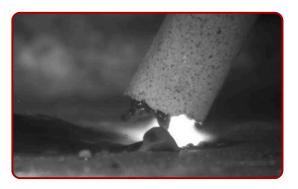
MIG/MAG



TIP TIG



STICK





Industry Benefits



Fast Error Detection



Faster Set-up Time



Robust For 24/7 Use



Remote Operation





AI/Cloud Integration



Automation Integration



Improved Ergonomics



No Toxic Fumes



Quality Documentation



Welder Eye Safety



C300 Series

Most compact solution

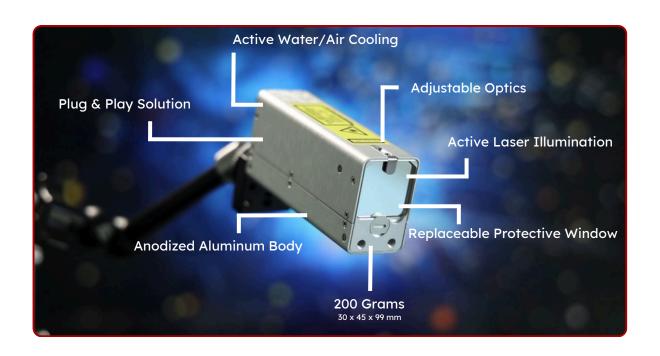


C300

GigE Version, Baumer Camera Electronics

C350

USB 3, High-Speed Version, Baumer Camera Electronics





	C300	C350	
Main features	Most compact design	Most compact design	
	Baumer electronics & SDK	Baumer electronics & SDK	
Connectors	M12 GigE, M8 power	USB 3 Micro-B, M8 power	
Sensor resolution (pixel)	1440x1080	1440×1080	
Max frame rate full resolution (fps)	70	200	
Max frame rate @ 2x2 binning 720x540 pixels (fps)	100	500	
Working distance, WD (mm)	150300	150300	
Field of view (mmxmm) vs WD (mm)	28x21@150 40x30@200 62x47@300	28x21@150 40x30@200 62x47@300	
Camera interface	GigE	USB 3	
Illumination	650nm laser, class 3R	650nm laser, class 3R	
Size (WxHxL, mmxmmxmm) *1	30x45x99	30x45x99	
Weight (g)	200	200	
Operating ambiant temperature (°C)	10300 (with cooling and insulation, non- condensing)	10300 (with cooling and insulation, non- condensing)	
Cooling options	passive or active (air/liquid circulation)	passive or active (air/liquid circulation)	

^{*1} excluding connectors



C400 Series

Most robust solution

C400-H

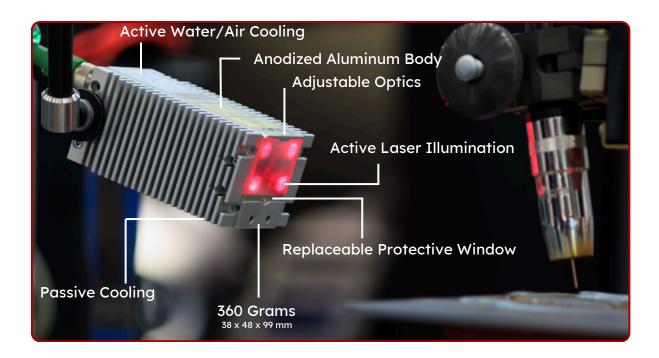
GigE Version, Hikrobot Camera Electronics

C400-B

GigE Version, Baumer Camera Electronics

C400-B-Wide

GigE Version, Baumer Camera Electronics, Wide Angle Optics







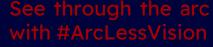
Main features	С400-В	C400-B-Wide	С400-Н
	Most robust design - IP64	Most robust design - IP64 Wide angle	Most robust design - IP64
	Baumer electronics & SDK	Baumer electronics & SDK	Hikrobot electronics & SDK
	Easy focus adjustment	Easy focus adjustment	Easy focus adjustment
Connectors	M12 GigE, M12 power connectors	M12 GigE, M12 power connectors	M12 GigE, M12 power connectors
Sensor resolution (pixel)	1440x1080	1440x1080	1440x1080
Max frame rate full resolution (fps)	70	70	70
Max frame rate @ 2x2 binning 720x540 pixels (fps)	100	100	100
Working distance, WD (mm)	150300	100300	150300
Field of view (mmxmm) vs WD (mm)	28x21@150 40x30@200 62x47@300	51x38@100 96x72@200 144x108@300	28×21@150 40×30@200 62×47@300
Camera interface	GigE	GigE	GigE
Illumination	650nm laser, class 3R	650nm laser, class 3R	650nm laser, class 3R
Size (WxHxL, mmxmmxmm) *1	38x48x99	38x48x99	38x48x99
Weight (g)	350	350	350
Operating ambient temperature (°C)	10300 (with cooling and insulation, non-condensing)	10300 (with cooling and insulation, non-condensing)	10300 (with cooling and insulation, non-condensing)
Cooling options	passive or active (air/liquid circulation)	passive or active (air/liquid circulation)	passive or active (air/liquid circulation)

^{*1} excluding connectors



Value In Sight





- High-quality visualization of welding processes in real-time
- Clear view with all details without disturbing process light
- Reveals the details of the welding process core at once (e.g. melt pool, keyhole, defects)



Better quality control through real-time view

- Detection of problems and defects early in the process
- Alignment of the welding torch to the gap, observe melt pool behavior, see the filler material, etc.
- Process documentation for quality assurance



Save time and resources -Less scrap and higher yield

- Early defect detection for immediate process corrections
- Savings in materials, time and work
- Improved manufacturing repeatability and traceability
- Savings in process set-up and problem-solving time
- Minimized downtime or lost production time



Education Benefits



Realistic Theory Learning



Instant Defect Spotting



Targeted Focus Area



Recorded Evaluations/Exams





Weld Fusion Details



Improved Teacher Techniques



Shared Live View



No Toxic Fumes



No UV Radiation



Welder Eye Safety





www.cavitar.com





