

SS420 Series ~ Color Zoom Subsea Camera Assembly Specifications



OVERVIEW:

The SIDUS Solutions SS420 series of color zoom cameras is a robust video inspection tool equipped with instrumental functions not found in other models on the market today. At the heart of this powerful tool is a 1000 TVL color camera module encompassing a 30x optical zoom lens, 12x digital zoom and a 1/2.8" Progressive Scan STARVIS CMOS imaging sensor.

The compact design, simple installation, and power-packed features make operation painless and rewarding. This modern camera permits electronic photographic images to be captured, resulting in far better-quality output than images captured from standard video grabber methods. Video output can be provided in NTSC or PAL.

The SS420 possesses controllable features including iris, focus, mirror imaging and adjustable zoom and shutter speeds. Standard features such as auto focus and auto exposure can be overridden manually, providing further control over the inspection process. The camera has both Wide Angle and Non-Wide Angle field-of-view options.

Item Description	Material	Depth Rating
SS420	Anodized 6061-T6 Aluminum	3000 meters
SS421	Stainless Steel	3000 meters
SS422	Titanium	3000 meters



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OPTICAL SPECIFICATIONS:

Lens Focal Length	f=4.3mm ~ 129mm, F1.6 to F5.0
Zoom	30x optical / (12x digital)
Field of View	Wide Angle: 76° diagonal in water Non-Wide Angle: 57° diagonal in water, 74° diagonal in air
Iris Control	Manual to Automatic
Focus Control	Manual to Automatic
Focus in Min Working Distance	0.01 (WIDE) to 1.0 (TELE) - infinity
White Balance	Automatic

ELECTRICAL SPECIFICATIONS:

Horizontal Resolution	1000 TV Lines
Sensitivity	0.1Lux Day mode, 0.05Lux Night Mode
Sensor Type	1/2.8-inch SONY EXMOR R Progressive Scan CMOS
Signal to Noise	>55 dB (AGC Off, DSS Off)
Video Output	1.0 Vp-p, 75 ohm
Power Input	12-30 VDC / 400mA (max)
Communication	Analog, RS-485
Connector	Customer selectable—Subconn is standard

ENVIRONMENTAL SPECIFICATIONS:

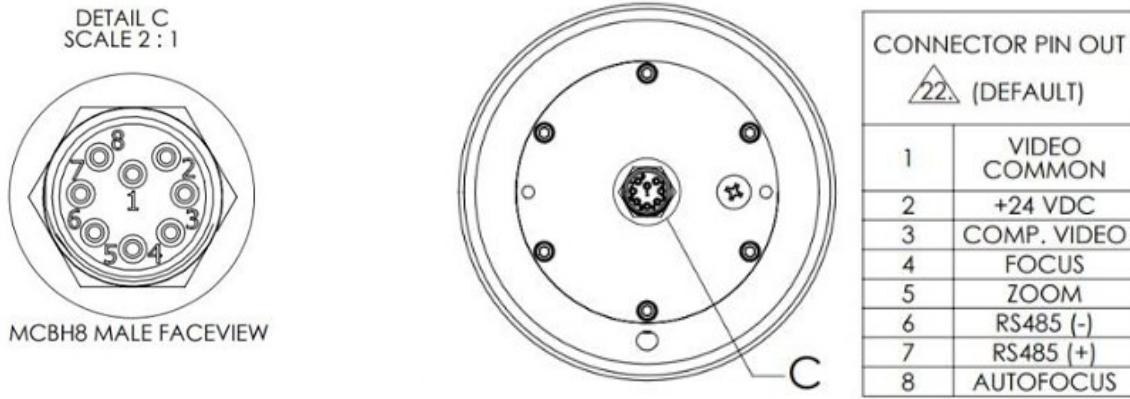
Operating Depth	3000 meters / Up to 10,000 feet
Temperature Range	-5°C to + 50°C (14°F to 122°F)
Storage Temperature	-20°C to + 60°C (-4°F to 140°F)
Housing Material	Anodized 6061-T6 Aluminum
Window Material	Optical Grade, Sapphire or Acrylic
O-Ring Material	Buna



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MECHANICAL SPECIFICATIONS:

	Wide Angle	Non-Wide Angle
Dimensions	5.75" Diameter (max) x 10.45" Length (excluding connector), 4" Diameter minimum around the body	3.938" Diameter x 6.471 Length (excluding connector)
Weight in Air	9.9lbs [4.5kg]	4.4lbs [2.7kg]
Weight in Water	6.0lbs [2.7kg]	1.8lbs [0.8kg]



DESIGN:

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