

MS-F21A 1/3 type 320k pixels B&W board camera

MS-F41A 1/3 type 470k pixels B&W board camera



### Future

- 1/3 type 320k Pixels CCD (MS-F21A)  
470k Pixels CCD (MS-F41A)
- TV System : CCIR
- Minimum Sensitivity : 0.05 lx (MS-F21A)  
0.1 lx (MS-F41A)
- Compact and Lightweight 32x32mm approx 20g
- Video Output : VS
- Auto Gain Control
- External synchronization (HD/VD)
- Backlight Compensation
- Board Camera Lens / CS Mount / Vari-focal Lens
- Power source : DC12V

### Connector Outputs

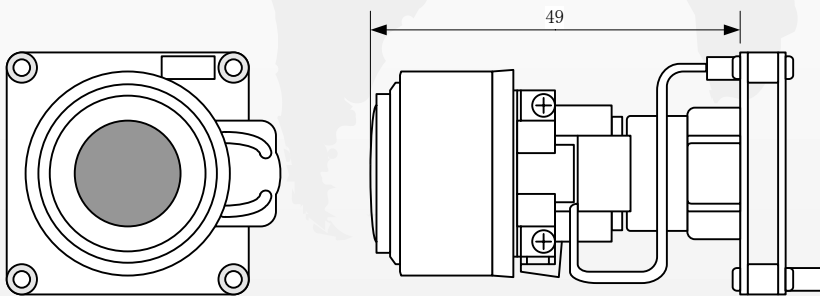
I/O Connector (DF13B-10P-1.25V)	
Pin No.	Signal names
1	+12V
2	GND
3	VD
4	HD
5	CLK
6	EVD
7	EHD
8	IRIS_OUT
9	VIDEO_GND
10	VIDEO

Remote Connector (Option)53398-1071	
Pin No.	Signal names
1	+5V
2	AGC CONT
3	AGC ON/OFF
4	GAMMA ON/OFF
5	GAMMA 0.6
6	SHUTTER MODE2
7	SHUTTER3
8	SHUTTER2
9	SHUTTER1
10	SHUTTER MODE1

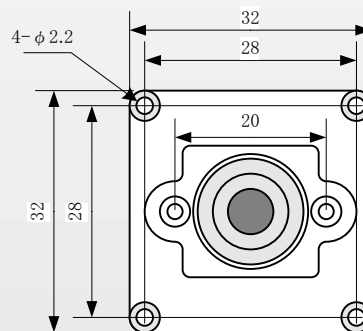
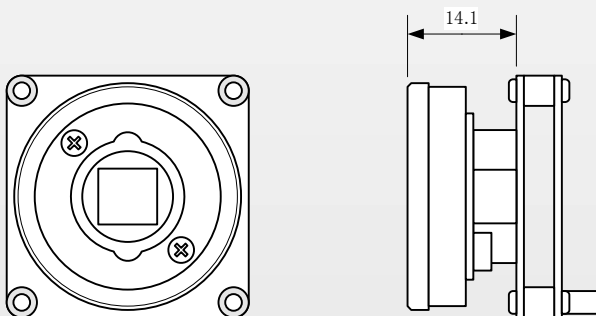
Auto iris connector BM04B-SRSS-TB	
Pin No.	Signal names
1	DRIVE-
2	DRIVE+
3	DUMP-
4	DUMP+

### Mechanical Drawings

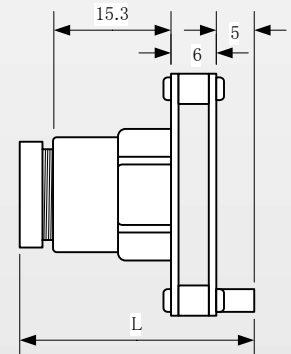
Vari-focal Lens



CS mount



M12 Lens



## Specifications

Function Items	Specification	
Model Name	MS-F21A	MS-F41A
Signal System	CCIR	
Image Sensor	1/3 type IT CCD	
Effective picture elements	500(H) x 582(V)	752(H) x 582(V)
Horizontal Resolution	450 TV Lines	560 TV Lines
S/N Ratio	56dB (AGC OFF)	
Minimum illumination	0.05 lx (F1.4)	0.1 lx (F1.4)
Video output	VS:1.0V(p-p)/75Ω	
Gamma	0.45 / 0.6 / 1.0 (DIP SW)	
Auto iris	DC iris lens drive	
Sync system	Internal / External (HD/VD)	
Lens mount	Vari-focal Lens / M12 / CS mount / Non mount	
Power requirements	DC12V	
Current consumption	Approx. 90mA	Approx. 110mA
Dimensions	32(W)×32(H)mm	
Mass	Approx. 20g (M12 type)	
Operating temperature	-10 to +50°C	
Operating humidity	20 to 80% (no condensation)	

## SW settings

Switch		
Pin No.	Signal name	Function
1	SHUTTER MODE1	Mode setting 1
2	SHUTTER1	Shutter setting 1
3	SHUTTER2	Shutter setting 2
4	SHUTTER3	Shutter setting 3
5	SHUTTER MODE2	Mode setting 2
6	GAMMA ON/OFF	OFF:SW7setting, ON:GAMMA OFF
7	GAMMA 0.6/0.45	OFF:0.45, ON:0.6
8	AGC ON/OFF	OFF:AGC ON, ON:AGC OFF

Shutter speed setting			
SW2	SW3	SW4	Shutter speed
ON	ON	ON	1/100
ON	ON	OFF	1/250
ON	OFF	ON	1/500
ON	OFF	OFF	1/1000
OFF	ON	ON	1/2000
OFF	ON	OFF	1/5000
OFF	OFF	ON	1/10000
OFF	OFF	OFF	1/100000

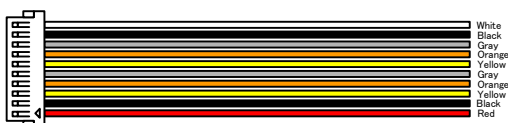
Shutter mode setting		
SW1	SW5	Function
OFF	OFF	No electronic iris limiter
ON	OFF	An electronic iris limiter (1/100)
OFF	ON	Shutter mode
ON	OFF	Shutter off

## LENS lineup

Standard LENS							
Model name	Focal length	F No.	Horizontal	Vertical	Diagonal	FIX	
MD15(M12)	12mm	2.2	20°	15°	24°	FIX	
MD23(M12)	8mm	2.0	30°	24°	36°	FIX	
MD33(M12)	6mm	1.8	53°	32°	53°	FIX	
MD45(M12)	4.3mm	2.0	62°	49°	76°	FIX	
MD55(M12)	3.6mm	2.0	75°	55°	93°	FIX	
MSA266B(φ14)	2.6~6.0mm	1.4	99.8°~48.1°	75.3°~36.2°	123.2°~59.9°	Auto iris (DC)	
MSA2810B(φ14)	2.8~10.0mm	1.2	28.6°~101.8°	21.5°~74.3°	25.8°~132.1°	Auto iris (DC)	
MSA490B(φ14)	4.0~9.0mm	1.5	68.0°~32.1°	50.2°~24.1°	86.2°~40.2°	Auto iris (DC)	
MSA922B(φ14)	9.0~22.0mm	1.8	30.7°~12.7°	22.7°~9.5°	39.0°~15.8°	Auto iris (DC)	
MT308A-200(CS) MT308AIR-200(CS)	3.0~8.0mm	F1.0~CLOSE	91.0°~35.9°	66.6°~26.9°	112.7°~44.8°	Auto iris (DC)	
MT550A-200(CS)	5.0~50.0mm	F1.4~CLOSE	53.6°~5.5°	40.2°~4.2°	67.0°~6.8°	Auto iris (DC)	
MT308M-200(CS)	3.0~8.0mm	F1.0~CLOSE	91.0°~35.9°	66.6°~26.9°	112.7°~44.8°	Manual	
MT550M-200(CS)	5.0~50.0mm	F1.4~CLOSE	53.6°~5.5°	40.2°~4.2°	67.0°~6.8°	Manual	
MT25HB-200(C)	12mm	F1.8~16	22.4°	16.6°	27.8°	Manual	
MT17HF-200(C)	16mm	F1.6~16	16.9°	12.7°	21.1°	Manual	
MT20HC-200(C)	25mm	F1.6~16	11.0°	8.2°	13.7°	Manual	
MT35HB-200(C)	35mm	F2.1~22	7.8°	5.9°	9.7°	Manual	

## Accessories

Harness : HN-1015N (150mm)



Remote control harness : HN-1015M(300mm)



# MOSWELL CO.,LTD

<http://www.moswell.co.jp>

1-11-12 HIRANUMA,NISHI-KU,YOKOHAMA,KANAGAWA,  
220-0023,JAPAN  
TEL 045-290-7182  
FAX 045-290-7151  
e-mail:sales@moswell.co.jp

Distributors