OEM Specifications

For OPCOM Wireless Camera & Receiver-Monitor

Products Name / Model

Digital Wireless Camera / CPV-SC-WC1
Digital Receiver-Monitor / CPV-SC-DP1

OPCOM Inc. OPCOM O.E. (Dongguan) Inc.	CBC Co., Ltd.

1. Scope and Products

This document of OEM specifications is applied to following products manufactured by OPCOM Inc. (8F-5, No. 6, Lane 609, Sec. 5, Chung Hsing Rd. Sanchung Dist., New Taipei City 241, Taiwan) and OPCOM O.E. (Dongguan) Inc. (Gu Cun lndustry Estate, Dajing Countryside Committee, Houjie Town, Dongguan City Guangdong, China 523958) ("OPCOM") as OEM of CBC Co., Ltd. (2-15-13, Tsukishima, Chu-ku, 104-0052 Tokyo, Japan) ("CBC").

■ Product Name / Model: Digital Wireless Camera / CPV-SC-WC1
Digital Receiver-Monitor / CPV-SC-DP1

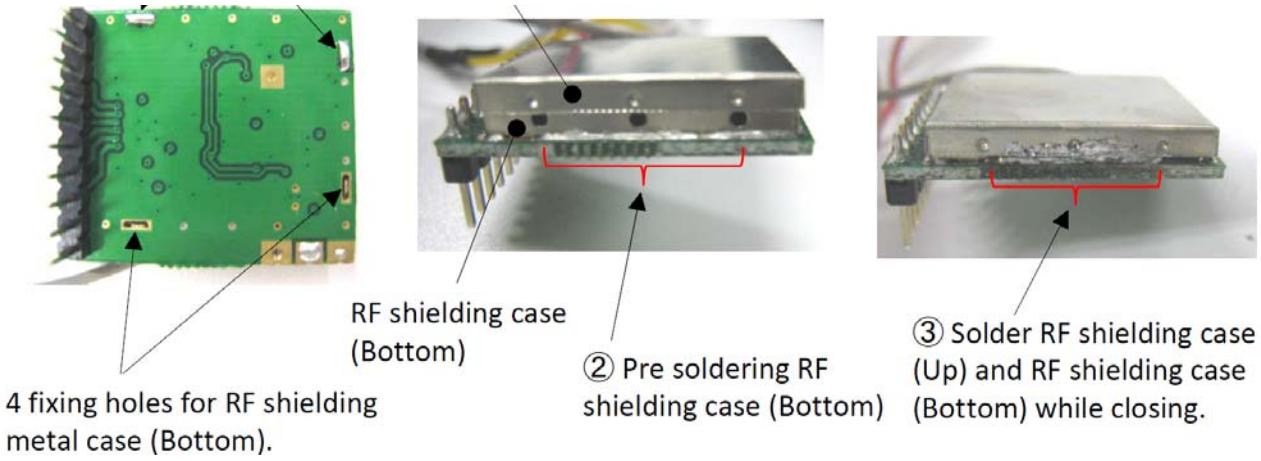
* Manufacturer's Model: CS38F6

2. Specifications

Wireless Camera	
Model	**CPV-SC-WC1**
Wireless Frequency	2.4 GHz (2402~2480 MHz)
Electric Wave Type	F1D
Band Width between Channels	2MHz
Number of Channels	40
Communication Method	Half duplex communications
Rated Output of the Transmitter	1.8mW/MHz
Oscillation	Frequency synthesizer method controlling by crystal transmission (16MHz)
Modulation Method	GFSK
Spreading Method	Frequency Hopping
Data Transmission Speed	2Mbps
Frequency which is equal to Transmission Speed of Modulation Signal	2MHz
Antenna Type	λ/4 Whip (V)
Antenna Gain	3.0 dBi ≧
Antenna Impedance	50Ω
Guarantee of Construction	Soldering the metal cover of RF circuit not to be opened.
Radio Equipment Type Certificate Number	008-120025
RF Module	NORDIC nRF24L01

Receiver / Monitor	
Model	**CPV-SC-DP1**
Wireless Frequency	2.4 GHz (2402~2480 MHz)
Electric Wave Type	F1D
Band Width between Channels	2MHz
Number of Channels	40
Communication Method	Half duplex communications
Rated Output of the Transmitter	1.8mW/MHz
Oscillation	Frequency synthesizer method controlling by crystal transmission (16MHz)
Modulation Method	GFSK
Spreading Method	Frequency Hopping
Data Transmission Speed	2Mbps
Frequency which is equal to Transmission Speed of Modulation Signal	2MHz
Antenna Type	λ/4 Whip (V)
Antenna Gain	3.0 dBi ≧
Antenna Impedance	50Ω
Guarantee of Construction	Soldering the metal cover of RF circuit not to be opened.
Radio Equipment Type Certificate Number	008-120026
RF Module	NORDIC nRF24L01

* Above specifications are certified by the registered certification body under Radio Equipment Type Certificate System in Japan.
* Digital Wireless Camera (CPV-SC-WC1) and Receiver-Monitor / CPV-SC-DP1 should be manufactured according to the specifications mentioned above.



Guarantee of Construction

VIDEO	
Device	1/4" Color Sensor
Total Pixels	640×480
Compression	MPEG4
Frame Rate	640 × 480 up to 30 fps
Display	7" Color LCD (Quad Display)
Scanning	2:1 Interlace
Signal	NTSC
Wireless Range	Outdoor: 150m, Indoor: 50m
Wireless Pairing	Easy One Push
Synchronization	Internal
Horizontal Resolution	450 TV Lines
Minimum Illumination	0 Lux when IR on
IR Cut Filter	Mechanical
IR LED	30 pcs IR LED, Effective 25m
Lens	Megapixel, Fixed, 3.6mm, F2.0

AUDIO	
Wireless Camera	Built-in Mic
Receiver / Minitor	Built-in Speaker

OPERATIONAL	
White Balance	Auto
Backlight Compensation	Auto
Electric Shutter	Auto
Gain Control	Auto
Auto Exposure Control	Auto
Flicker-less	60Hz or 50Hz (by order)
Digital Noise Reduction	Auto
S/N ratio	More than 45dB (AGC off)
Gamma	0.45

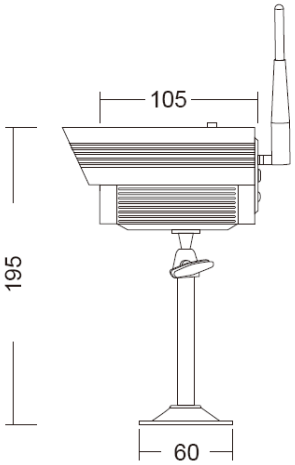
ENVIRONMENTAL	
Operation temperature	-10℃～+50℃
Humidity	30%～90% RH

MECHANICAL	
IR Glass	Double
Weathering Resistance	IP66
Bracket	Metal
Sun Shield	Metal
Certifications	CE, FCC, RoHS, WEEE
Dimensions/Weight	φ70×105 mm/0.38Kg 175×122×33 mm/ 0.40Kg

ELECTRICAL	
Input Voltage	DC 12V, 1A/500mA
Power Consumption	1.2W/ 3.9W(IR on)

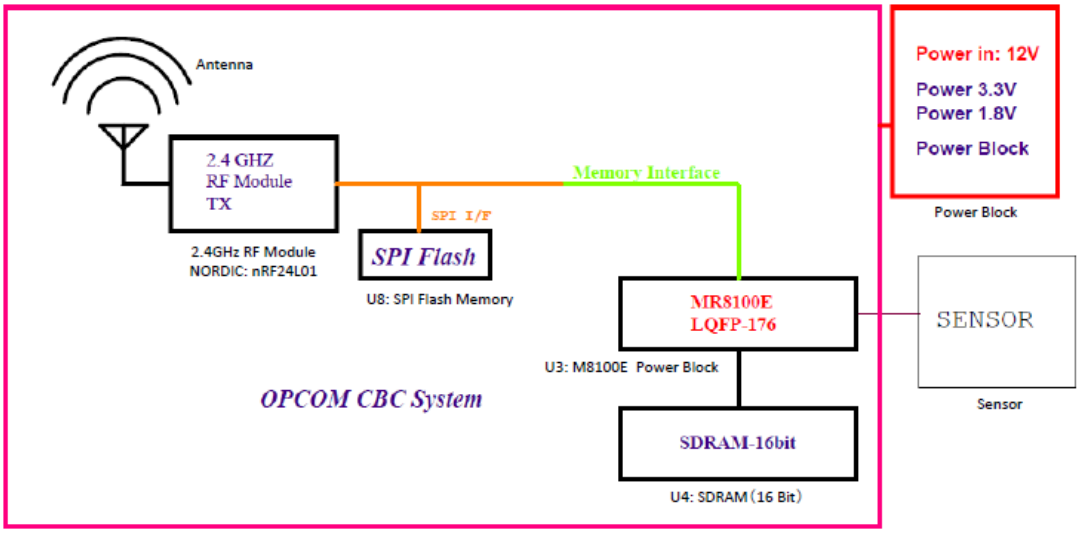
■ Pictures and Drawings

● Digital Wireless Camera (CPV-SC-WC1)

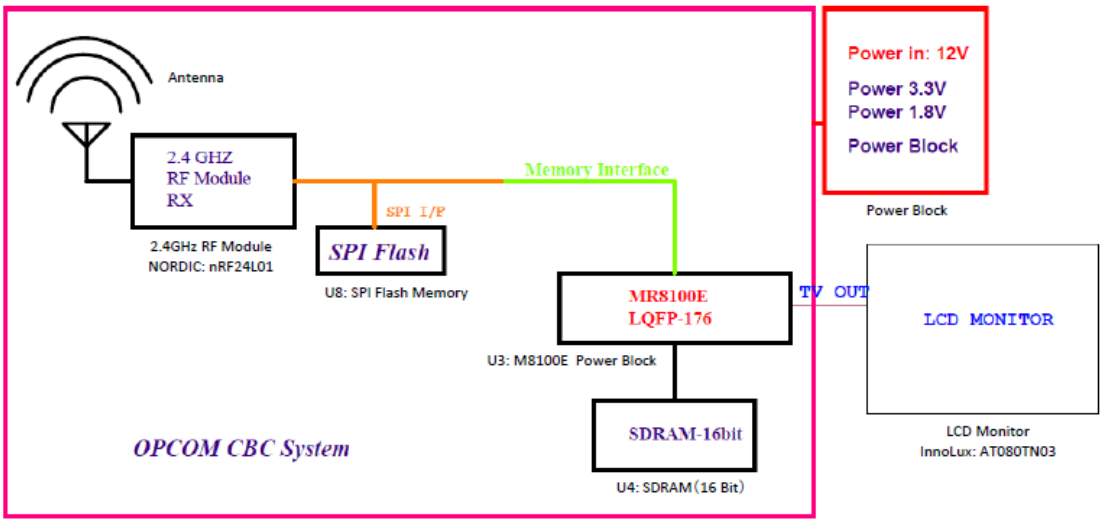


● Digital Receiver-Monitor (CPV-SC-DP1)

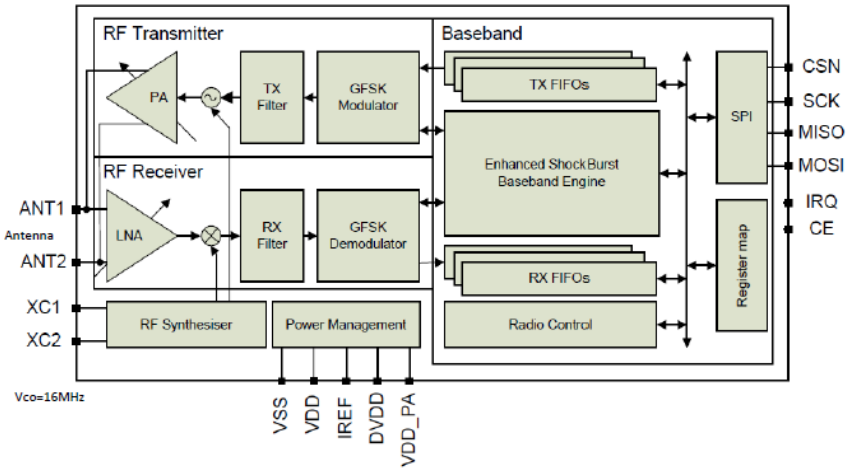
3. Block Diagram



Digital Wireless Camera (CPV-SC-WC1)



Digital Receiver-Monitor (CPV-SC-DP1)



RF Module (NORDIC nRF24L01)

4. Marking

Following FCC certificated labels should be fixed on designated places of products.

① Certificate Label with FCC IDfor Camera

② Certificate Label with FCC ID for Receiver-Monitor

5. Package Contents

#	Description	Model / Specifications	Quantity
①	Digital Wireless Camera with sun shield	CPV-SC-WC1	1
②	Antenna	E73AC10731T0	1
③	Camera Bracket		1
④	Screw Package		1
⑤	AC/DC Adapter	Input: AC100-240V, 50/60Hz, 0.2A Output: DC 12V, 0.5A (PSE certified, φ2.1/φ5.5)	1
⑥	Digital Receiver-Monitor	CPV-SC-DP1	1
⑦	Antenna	E73AC10731T0	1
⑧	Monitor Bracket		1
⑨	AC/DC Adapter	Input: AC100-240V, 50/60Hz, 0.85A Output: DC 12V, 1.5A (PSE certified, φ2.1/φ5.5)	1
⑩	Instruction Manual		1

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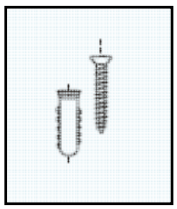

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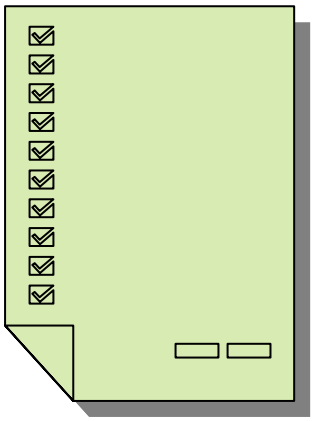

6. Warranty

OPCOM warrants to the original owner of Products which are first purchased that Products will free from defects in materials and workmanship for 1 year beginning on the date of the Product's initial purchase.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.
However, there is no guarantee that interference will not occur in a particular installation.
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the followingmeasures:
-- Reorient or relocate the receiving antenna.
-- Increase the separation between the equipment and receiver.
-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-- Consult the dealer or an experienced radio/TV technician for help.