BCS03 consists of the front-end sensor (RF, EO/IR cameras) and the back-end control system. The front-end sensor is mainly composed of radar, EO/IR system, controller etc. The back-end system consists of computer and monitoring/processing software. The radar detects targets in the specific range, transmits the detected target information to the monitoring terminal, and display on GIS system.

The EO/IR system is equipped with highly sophisticated electro-mechanically modular electro- optical system, which enables day and night observation for detection, recognition and Identification of targets. The electro-optical system includes a night camera, a daytime camera and PTZ.

Once a target is detected by radar, the camera is automatically diverted into the direction of the possible detection. Once the camera has possible detection it provides the optimal zoom in order to make a positive identification of the target, and further operations will be carried out manually or automatically.

Advanced thermal magnetic camera is optional.

Applications:

Tactic detection and identification, night surveillance and monitoring, combating smuggling

Monitoring roads, pipelines, ports and borders etc., also intrusion warnings in important areas

Features:

Detection and identification of target by video and radar integration

High anti-jamming and anti-clutter performances

High performance in searching, tracking and identifying multiple low, small and slow targets in complex electromagnetic environment;

High sensitivity and stable performance;

High resolution and detection accuracy;

Multiple radars can form a circular surveillance network with extended surveillance range;

Advanced background compensation gradient algorithm and embedded soft control filtering technology.

Specifications:

Frequency band: Ku

Detection range: (Pd=0.8 Pfa=10^{-6})

Armed men: 4km (σ=0.7m^2)

Small vehicles: 6km (σ=2m^2)

Large vehicles: 10km (σ=10 m^2)

Antenna sector scan angle: 0-360º

Gain: >33dB

Azimuth plane: <2º

Amplitude: 45o

Sidelobe level: <-28dB

Radial velocity of detectable target: 3km/h-72km/h

Azimuth Angle accuracy: <5º

Range and scope: 240m-15km

Distance resolution: <8m

Azimuth resolution: <2º

MTBF: >2000hr

MTTR: <30min

Erect and Roll-up time: <1min

Continuous work time: >7hr

Power consumption: <80W

Transmitted power: 2w

Total weight (excl. battery: 25kg

Thermal Camera	Image sensor	Vanadium Oxide Uncooled Focal Plane Arrays
	Max. resolution	640 x 512
	Detector pitch	17µm
	Respond waveband	8µm-14µm
	NETD	<40m k(@25oC, F#=1.0)
	Lens (focal length)	100mm
	MRAD	0.17mrad
	Field of View	6.23°x 4.98°
	Min. Focusing Distance	10m
	F Number	1.0
	Focal length	6.7-330mm，49X
	Digital zoom	16x
	Field of View	41.3°-1.2°(Wide-Tele)
	Min. Working Distance	10-1500mm (Wide-Tele)
	Aperture range	f1.8-f6.1
	Focus mode	Auto / Semi-auto / Manual
	WDR	Digital
PTZ	Movement Range	Pan: 360° Continuous Rotate; Tilt: From -90° to + 40° (auto flip)
	Pan Speed	Configurable, From 0.1°/s to 110°/s
	Tilt Speed	Configurable, From 0.1°/s to 50°/s
	Proportional Zoom	Yes
	Preset	300
	Patrol Scan	8, Up to 32 Presets Per Patrol
	Pattern Scan	4, More Than 10 Minutes Per Pattern
Optical	Power Off Memory	Yes

Camera	Focal Length	6.7-330mm，49X
	Digital Zoom	16x
	Field of View	41.3°-1.2°(Wide-Tele)
	Min. Working Distance	10-1500mm(Wide-Tele)
	Aperture Range	f1.8-f6.1
General	Power	24V AC,120W
	Work Temperature/Humidity	-40 to +60°C (-40 to +140°F); Humidity: <90%
	Protection Grade	Open-ended API, support ISAPI; Support HIKVISION SDK and Third-party Management Platform