Image Product Specification

Image format
Analogous to an aerial film image at a format of 23 cm x 15 cm, scanned at 13 μm

Image data formats
Image storage format in level 2
Color at level 3

Digital Camera Technical Data (Sensor Unit S-X)

Panchromatic image size
17,310 * 11,310 pixels

Panchromatic physical pixel size
6 μm

Input data quantity per image
624 Mega Bytes

Physical format of the focal plane
104 mm * 68.4 mm

Panchromatic lens focal distance
100 mm

Lens aperture
f = 1/5.6

Angle-of-view from vertical, cross track (along track)
55° (37')

Color (multi-spectral capability)
4 channels -- RGB & NIR

Color image size
5,770 * 3,770 pixels

Color physical pixel size
6 μm

Color lens system focal distance
33 mm

Color lens aperture
f = 1/4.0

Color field of view from vertical, cross track (along track)
55° (37')

Shutter speed options
1/500 to 1/32

Forward-motion compensation (FMC)
TDI controlled

Pixel size on the ground (GSD) at flying height of 500 m (at 300m)
2.9 cm (1.8 cm)

Frame rate per second (minimum inter-image interval)
1 frame per 2 seconds

Analog-to-digital conversion at
14 bits

Radiometric resolution in each color channel
>12 bit

Physical dimensions of the camera unit
Face 45cm x 45cm x 60 cm

Weight
~ 55 kg

Power consumption at full performance
150 W

In Flight Data Storage D-X and Data Processing C-X

Unlimited with use of multiple data units D-X; per D-X unit ~4.2 TB

Unlimited with multiple D-X units; per D-X unit ~6600 images

In less than 3 minutes

C-X with 14 Pentium-M CPUs; each D-X with 14 disks

Storing mirror images of the data on two DX units

Removable D-X data units; docking station (optionally mobile)

Width 50cm x Depth 36cm x Height 65 cm

< 92 kg

~ 65 kg

Weight of C-X

Weight of single D-X

< 16 kg

Power consumption at full performance

700 W

Operational Specification

Data collection period at 70% & 20 % overlap, at 20 cm GSD (film scale 1:10,000), 140k/m

11 hours per single D-X unit

OPC Software, Mobile Server, Office PC Network, Laptop, C-X

Shipping of D-X, or transfer to high capacity storage medium via Mobile Server

Using adapter ring for all current film camera mounts (PAV-30, 2/3 T-AS, GSM3000)

Compatible with commercial systems (CCNS-4, Trackair, Vega, ...)

Compatible with DGPS/IMU systems (IGI’s Aero-Control, Applanix POS-AV)

TIFF-output compatible with Customer’s photogrammetric production software

Approximately 2μ

For more Information, contact:

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