G3 Portable Wireless Controlled X-Ray System

The G3 X-Ray System is a portable, wireless, easy to use and completely computerized Inspection System for the investigation of objects like parcels, boxes, luggage etc. The System consists of a remote control unit, a camera box, the X-Ray source and accessories.

Specific customised software and computer systems enables the unit to start within a few seconds. No knowledge of computer, operating systems or software is needed to operate.

Camera unit, remote control and all accessories are placed in only one housing during transport saving space and weight.

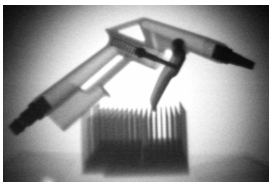
The G3 system works fully digital for most failure-free operating and sharp pictures. The wireless connection allows up to 150m outdoor or 50m indoor distance for save operation.

The G3 is a fail-save, precise and easy to use equipment for law enforcement, police, airport and all kind of safety purposes. The system can also be used in any kind of material examination.

Technical Specifications

Camera Box

Imaging System	
Imaging Area	310 x 240mm
Pickup Device	Interline Transfer 1/2" CCD low light long integration camera
Effective Pixel	752 x 582
Sensitivity	400 lx F5.6 (Gain min.)
Min. Illumination	0.3 lx (Gain max., F1.4)
Video S/N Ratio	60dB
Environment	Operating Temperature : -10℃ ~ 45℃ Storage Temperature : -20℃ ~ 60℃ Operating Humidity : 20% ~ 80% non-condensing Storage Humidity : 20% ~ 95% non-condensing
Shock Resistance	70G
CPU G3	
Model	G3
CPU	Motorola® Coldfire MCF5272, 66MHz 63 MIPS
Memory	64MB RAM
Storage	8 MB Flash ROM
Network	10/100 Mbps Ethernet RTL 8139
Environment	Operating Temperature : -10℃ ~ 85℃
Video Capture System	monochrome Video Frame Grabber G4
Wireless Device	Access Point with unique Connection to the remote Control Device MPC100 (no interfere with other wireless Devices possible)
Batteries	2x 6V, 7.2Ah (3 hours Working Time / 3 hours Charging Time)
Power Adaptor	Universal AC 90V ~ 265V, 47Hz ~ 63Hz



Software

Software specification
Display of images in normal, inverse or pseudo colour mode (The colour table for the pseudo colours can be individually modified by User)
manual brightness control
manual contrast control
serially numbered overview
direct print to optional printer
easy handling of 200% zoom
low battery warning for camera box and remote control
several image filter and editing tools

Technical Specifications

Remote Control Device MPC 100 E

Processor	Intel® XScale PXA255 400 MHz and Companion Chip SA1111
Operating System	Windows® CE.NET
Display	10.4” Active Matrix TFT 250 nits high brightness LCD 800 x 600 SVGA
Pointing Device	Built-in resistive touch panel or external PS/2 or USB Mouse
Battery	Smart Li-ion battery (4 hours Working Time / 2 hours Charging Time)
Power Adaptor	Universal AC 90V ~ 265V, 47Hz ~ 63Hz
I/O Ports	1x PCMCIA Type II 1x Compact Flash Type II supports up to 1GB 1x RS-232/422/485 1x PS/2 1x USB Type A
Memory	128MB optional up to 256MB
Picture Storage Capability	116 Pictures further Pictures can be stored on Compact Flash Card or IBM® Microdrive optional external USB Mass Storage Devices can be added
Network	802.11b Wireless LAN Card
Physical	295(W) x 235(D) x 28(H) mm 1.35 Kg (with Battery Pack)
Environment	Operating Temperature : 0℃ ~ 40℃ Storage Temperature : -20℃ ~ 60℃ Operating Humidity : 20% ~ 80%

or optional

Remote Control Device Quality Laptop

Processor	**Intel® Dual Core Processor**
System Memory	512MB DDR-SDRAM minimum
Harddisk	80 UDMA100 minimum
Combodrive	DVD/CD-R/RW
Modem	V.92 56K
Display	15” XGA TFT LCD
Battery	Li-Ion Battery-Life appr. 4 hours
Power Supply	100~240V, 50~60Hz AC
Operating System	Windows®XP
Operating Software	Special Customized Software for X-Ray Imaging and Controlling of all Parameters from Camera Box and X-Ray Source

Technical Specifications

X-Ray Source XR200

X-Ray Dose per Pulse	~3.1 mill roentgens @ 30mm form the front of the Unit
Number of Pulses per Exposure	1 ~ 99 adjustable by user
Number of Pulses per Battery Charge	4000
Number of Pulses per second	25
Expected Tube Life	100 000 Pulses
Max. Photon Energy	150 KVP
X-Ray Pulse Width	60 nanoseconds (60 x 10^{-9} s^{-1})
Battery	14.4V 1 hour charging time
Max. Duty Cycle	200 Pulses every 4 minutes (3000 Pulse per hour)
Power Adaptor	100V ~ 120V or 220V ~ 230V, 50Hz ~ 60Hz
Environment	Operating Temperature : -23℃ ~ 50℃
Physical	115(W) x 317(D) x 190(H) mm 5.5 Kg (all Dimensions with Battery Pack)
Manual Trigger	delayed action release (60s) for manual triggering
Switch-On	no Warm-Up required
X-Ray Leakage	see Manual from Golden Engineering, Inc. (USA)

The G3 System is delivered in two strong carrying cases

<u>System dimensions</u>

Camera box with remote control and accessories:
39 x 34 x 29 cm
(15.4 x 13.4 x 11.4 inch)

X-Ray Source:
49 x 38 x 20 cm
(19.3 x 15 x 7.9 inch)

Optional Equipment

- Detachable Castor System
- Dosimeter with Charger
- Tripod for X-Ray Source
- Second Battery for XR200
- Beryllium-window-tube for XR200
- X-Ray Generator, Golden Inspector model xrs 3
- Portable Colour Printer