

Bid Spec

1.0 Description

The digital recorder described shall be a Sanyo Model number DSR-5716P or equivalent. The recorder shall be an industrial grade 16-channel digital security video recorder with 2 drive bays for a maximum of 2TB hard disk drive.

2.0 Bid Specifications

The digital recorder shall be a 16-channel hard disk digital recorder. The digital recorder shall have the capability to 2 drive bays, and thus it shall have the capability to carry up to 4TB with the optional hard disk drives. The digital recorder shall have the capability to record in 28 recording speeds ranging from 100 images per second to 0.03 images per second with digital triplex simultaneous recording and playback up to 100 images per second. The digital recorder shall use field recording. The digital recorder shall have 5 different recording modes – 1. Normal recording, 2. Alarm recording, 3. Pre-alarm recording, 4. Static ROI recording, 5. Timer recording. The digital recorder shall have user-selectable allocations determined by percentages given to 2 recording areas, 1. Recording area, 2. Archive area. The digital recorder shall have the ability to record in 5 picture quality modes (Basic, Normal, Enhanced, Fine, Super Fine) with the top picture quality mode (Super Fine) representing 720 x 288 digital picture resolution.

The digital recorder shall have the ability to produce a picture with a resolution of 720 x 288 pixels. The image compression method shall be JPEG2000. The grey scale shall be a minimum of 256 steps. The digital recorder shall have the ability to produce 16 million different colours. The video format shall be PAL 1.0Vp-p at 75 Ohms, unbalanced.

The digital recorder shall feature 3 digital monitor outputs: MAIN , MON2 and VGA. These monitors shall provide full screen, quad screen, 9-split multiple screen, 16-split multiple screen and Plus screen display, both live as well as playback mode. Also, the digital recorder shall have the ability to display an individual camera or an automatic sequential live. This picture shall be displayed in full motion.

The digital recorder shall have a variable zone zoom capability while in the full screen display mode. The digital recorder shall have the ability to have individual dwell time setting capability for each camera.

The digital recorder shall have built-in coaxial and RS-485/422 telemetry allowing control of PTZ cameras of SANYO, PELCO, BBV, GE and AD. Telemetry shall be controlled from the buttons and a Jog / Shuttle dial on the front panel.

The digital recorder shall have a Jog / Shuttle control and one touch operation for Play/Stop, Record and Still. The digital recorder shall have high-speed digital fast-forward. The digital recorder shall have 1 audio inputs and 1 audio output. Audio recording capability shall be available at faster than 1 field per second recording.

The digital recorder shall have a built-in LAN terminal. The digital recorder shall have the capability to connect to any PC over a LAN, and it shall have the capability to monitor and setup the digital recorder through network. Also, video and audio recordings shall be downloaded to a networked PC under the condition of full screen display. The digital recorder shall support simultaneous multi-user remote access over a LAN / WAN (up to 15 users simultaneous, ID1, ID2, ID3 and ID4 level user).

The digital recorder shall also have a built-in USB terminal on the front or rear panel to connect CD-R/RW or DVD+R/+RW writer.

The digital recorder shall offer the following search modes:

1. Date/Time search
2. Alarm log search
3. Alarm search
4. Alarm thumbnail search
5. Archive area search
6. Motion detection search

The digital recorder shall have 16 BNC video inputs and 16 BNC video through outputs. The video outputs shall be self-terminating. The digital recorder shall have 2 BNC monitor outputs. The digital recorder shall have push button terminals for 16 alarm inputs, 1 master alarm output, and 16 sensor alarm outputs. The digital recorder shall have an RJ-11 type connector and a push-lock terminal for RS-485 control (SSP format). The digital recorder shall have a removable grounded plug. The digital recorder shall operate on AC 120 to 240 V, 50 / 60Hz.

The digital recorder shall feature 2-mode motion detection recording. Mode 1 shall interleave the corresponding alarmed camera with the non-alarmed cameras, thus giving an alarmed camera priority while maintaining information of all cameras. Mode 2 shall only record the alarmed camera.

The digital recorder shall have the ability to trigger alarm recording either by closed contact on alarm input, motion detection, or a requirement of both. The digital recorder shall have advanced motion detection that includes sensitivity, location, spray, and direction as criteria for a valid motion alarm.

The digital recorder shall have time period settings for:

1. Camera Masking - Individual cameras can be masked out according to their duration
2. Motion detector - Individual settings can be set for sensitivity/on/off for their duration
3. Dwell Time - Individual dwell times can be set for their duration.

The digital recorder shall have a multi-function, multi-criteria motion detection capabilities. This shall include 180 sensing points with dual A, B, A and B, A and NB, B to A, A to B, C zone settings for detecting size; includes individual light level camera settings for day and night detection. The motion detection function shall have timer duration settings and have 10 different sensitivity level settings.

The digital recorder shall be no larger than 420 x 96 x 365 mm (WxHxD) and weigh approximately 6.1 Kg (13.5 lbs) without HDD.

The digital recorder shall be CE mark and ISO9001 & ISO14001 certified.

3.0 Minimum Performance Specifications

MODEL DSR-5716P	
General	
Hard disk capacity	Max HDD capacity (technically) per bay: 2 TB (2 bays)
Signal format	PAL colour signal standard
Compression	JPEG2000
Picture Resolution	720 x 288 (Field)
Picture Quality	5 levels (Basic, Normal, Enhanced, Fine, Super Fine)
Colour	8 bit
Grey Scale	256 steps
Recording Speed	28 levels
Recording Type	Field recording
Recording Area	Normal, Archive
Menu Language	English / French / German / Spanish
Clock Setup	Day / Month / Year / Hour / Minute / Second
Buzzer	ON/OFF (Menu)
Playback	Playback, Reverse Playback, Still, Search
Zoom	2x zoom function (Single camera only)
Display	
Display setup	
Title	10 Characters
Title Position	Adjustable (up or down)
Multi Display	Position Change QUAD/MULTI 9/MULTI 16/Plus
Monitor Sequence	1 – 30 sec. Individual setup per monitor or per camera Camera ON/OFF setup with timer operation
Quad Sequence	1 – 30 sec.
Monitor Mask	ON/OFF setup per camera (for the hidden camera)
Main > Spot	ON/OFF (Same display as Main monitor on Spot monitor)

Audio	
Audio Input	1 (RCA pin jack)
Audio Output	1 (RCA pin jack)
Microphone input	1 (3.5mm mini jack)
Video	
Video Input	Camera In 16 (BNC x 16)
Video Output	Camera Out 16 (BNC x 16)
Monitor Output	2 (BNC)
VGA Output	1
Interface	
LAN terminal	1 (100BASE-TX Ethernet)
RS-485	RJ-11 x 2
RS-232C	1 (D-SUB 9pin)
USB port	2 (USB2.0)
Search Mode	
Date/Time Search	Search by time and date
Alarm search	Search by alarm event list
Alarm log search	Search by narrowing down a time period
Alarm thumbnail search	Search by alarm event thumbnails
Archive area search	Search archive images with event list
Motion detection search	Search by specifying motion against a certain period
Control Signal	
RS-485	1 (A/B)
Remote in	2 input for resistor alley switch
Alarm in / out	16 input (Normal Open Low level active) / 1 output (Active Low, Open Collector)
Sensor alarm output	16 output (Normal Open Low level active)
Alarm reset	1 input (Normal Open Low level active)
NON rec. out	1 output (Normal 5V low level active)
Clock set in	1 input (Normal Open Low level active)
Clock set out	1 output (Normal 5V low level active)
Warning out	1 output (Normal 5V low level active)
Disk Full out	1 output (Normal 5V low level active)
Alarm Full out	1 output (Normal 5V low level active)
External Timer in	1 input (Normal Open Low level active)
Electrical	
Power source	120 to 240 V AC, 50 / 60Hz
Power consumption	720 mA
AC inlet	3 pin (cable: 3 pin 1.8m)
Physical	
Operating conditions	Temperature: 5 deg. to 40 deg. Humidity: 80 % or less
Size (W x H x D)	420 x 96 x 365 mm
Weight	6.1 kg without HDD