

170

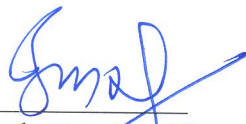
c)

**Network Video Recorder (NVR)**

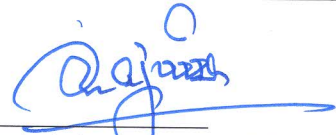
S. No.	Parameter	Specification
i.	Channels	64 Nos IP Channel
ii.	Max incoming	<b>640 Mbps or better</b>
iii.	Supported camera	ONVIF
iv.	Video Output	1 HDMI/I VGA/TCP/IP
v.	Display resolution	3840x2160, 1920x1200,1920x1080,1680x1050,1600x1200
vi.	Display speed	Upto 1920 ips
vii.	Digital zoom	X2-X12
viii.	Max throughput	<b>4k (UHD) resolution with 30 frames/sec (Maximum)</b>
ix.	Recording resolution	upto 12 MP ( depending on IP camera)
x.	Encoding Mode	CBR,VBR
xi.	Compression	H.265, H.264
xii.	Recording Mode	Time-Lapse, Event,Pre-Event, Panic Alarm In, Audio Detection , Trip -Zone, Tampering
xiii.	<b>Trigger events with suitable analytics</b>	<b>Video loss, text-in, ANPR,FRS at respective interface (as per requirement)</b>
xiv.	Performance	16ch full HD synchronous playback time-lapse , event log. Thumbnail
xv.	Search Mode	Motion, text in
xvi.	<b>Digital zoom</b>	<b>X2-x12/SATAx4/SATAx8,eSATAx1 (As per project requirement)</b>
xvii.	HDD	(upto 10 TB capacity for each disk), RAID 1,5/6, 10 supported
xviii.	Total capacity	4x4 (External)
xix.	Client connection	Gigabit Ethernet (client)x1
xx.	Video in connection	Gigabit Ethernet (video in) x3
xxi.	Remote data export	Yes, Email (attach clip)(cbf) ,(call back to
xxii.	Event notification	Notification (mobile)
xxiii.	Redudancy support	10:01
xxiv.	Two way audio	Yes, Local (NVR) :1 RCA/ 1RCA+1HDMI
xxv.	Audio in/out	IP camera:64/64 (depending on IP)
xxvi.	Alarm in/out	Local (NVR):4/1 IP camera: 64/64
xxvii.	Alarm reset in	1
xxviii.	Serial interface	RS232 (terminal block), RS 485
xxix.	USB	USB 2.0X2,USB 3.0X1, mouse control , network remote keyboard , front
xxx.	<b>User interface</b>	<b>Button (panic)</b>
xxx.	<b>Operating system</b>	<b>Embedded Linux/windows</b>

Contd.....2/-

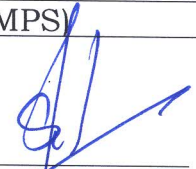
xxxii	Chasis	Rack type
xxxiii	Working temp	0-40 degree centigrade
xxxiv	Operating humidity	10-90%
xxxv	Power input	Ac 100-240 V (redundant SMPS)



(Ashok Kumar Sharma)  
ADG (Log) BSF



(Rajnish Kumar), PSO (E)  
BPR&D



(Surender Singh)DC  
CRPF



(R K Meel), DC  
CISF



(SI/RM Brajesh Bhardwaj)  
BSF



(Gagan Bhardwaj), AC  
SIW, BSF



(Insp/Comn Chhitar Mal)  
SSB

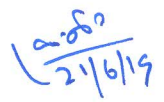


(Insp/Tele Thakar Ram)  
ITBP



(SI/RM Subhash)  
SIW, BSF

**Approved/Not approved**

  
21/6/19

(Rajni Kant Mishra)  
Director General  
Border Security Force



**Trial Directives of Network Video Recorder (NVR)**

S. No.	Parameter	Specification	Trial Directive
i.	Channels	64 Nos IP Channel	Specification to be verified by BOO through spec. sheet
ii.	Max incoming throughput	640 Mbps or better	Specification to be verified by BOO through spec. sheet
iii.	Supported camera	ONVIF	Specification to be verified by BOO through spec. sheet
iv.	Video Output	1 HDMI/ VGA/TCP/IP	Specification to be verified by BOO through spec. sheet
v.	Display resolution	3840x2160, 1920x1200,1920x1080,1680x1050,1600x1200	Specification to be verified by BOO through spec. sheet
vi.	Display speed	Upto 1920 ips	Specification to be verified by BOO through spec. sheet
vii.	Digital zoom	X2-X12	Specification to be verified by BOO through spec. sheet
viii.	Max throughput	4k (UHD) resolution with 30 frames/sec (Maximum)	Specification to be verified by BOO through spec. sheet
ix.	Recording resolution	upto 12 MP ( depending on IP camera)	Specification to be verified by BOO through spec. sheet
x.	Encoding Mode	CBR,VBR	Specification to be verified by BOO through spec. sheet
xi.	Compression	H.265, H.264	Specification to be verified by BOO through spec. sheet
xii.	Recording Mode	Time-Lapse, Event,Pre-Event, Panic Alarm In, Audio Detection , Trip -Zone, Tampering	Specification to be verified by BOO through spec. sheet
xiii.	Trigger events with suitable analytics	Video loss, text-in, ANPR, FRS at respective interface (as per requirement)	Specification to be verified by BOO
xiv.	Performance	16ch full HD synchronous playback time-lapse, event log, Thumbnail	Specification to be verified by BOO through spec. sheet
xv.	Search Mode	Motion, text in	Specification to be verified by BOO through spec. sheet
xvi.	Digital zoom	X2-x12/SATAx4/SATAx8,eSATAx1 (As per project requirement)	Specification to be verified by BOO through spec. sheet

xxvii.	HDD	(upto 10 TB capacity for each disk), RAID 1,5/6, 10 supported	Specification to be verified by BOO through spec. sheet
xxviii.	Total capacity	4x4 (External)	Specification to be verified by BOO through spec. sheet
xxix.	Client connection	Gigabit Ethernet (client)x1	Specification to be verified by BOO through spec. sheet
xxx.	Video in connection	Gigabit Ethernet (video in) x3	Specification to be verified by BOO through spec. sheet
xxxi.	Remote data export	Yes, Email (attach clip)(cbf) (call back to remote SW, PUSHMP4)	Specification to be verified by BOO through spec. sheet
xxxii.	Event notification	Notification (mobile)	Specification to be verified by BOO through spec. sheet
xxxiii.	Redundancy support	10:01	Specification to be verified by BOO through spec. sheet
xxxiv.	Two way audio	Yes, Local (NVR) :1 RCA/1RCA+1HDMI	Specification to be verified by BOO through spec. sheet
xxxv.	Audio in/out	IP camera:64/64 (depending on IP)	Specification to be verified by BOO through spec. sheet
xxxvi.	Alarm in/out	Local (NVR):4/1 IP camera: 64/64	Specification to be verified by BOO through spec. sheet
xxxvii.	Alarm reset in	1	Specification to be verified by BOO through spec. sheet
xxxviii.	Serial interface	RS232 (terminal block), RS 485	Specification to be verified by BOO through spec. sheet
xxxix.	USB	USB 2.0X2,USB 3.0X1, mouse control , network remote keyboard , front	Specification to be verified by BOO through spec. sheet
xxx.	User interface (optional)	Button (panic)	Specification to be verified by BOO through spec. sheet
xxxi.	Operating system	Embedded Linux/windows	Specification to be verified by BOO through spec. sheet
xxxii.	chasis	Rack type	Specification to be verified by BOO through spec. sheet



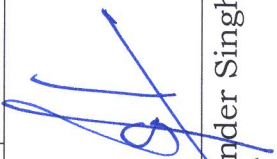
xxxiii	Working temp	0-40 degree centigrade	Specification to be verified by BOO through spec. sheet
xxxiv	Operating humidity	10-90 percent	Specification to be verified by BOO through spec. sheet
xxxv	Power input	Ac 100-240 V (redundant SMPS)	Specification to be verified by BOO through spec. sheet



(Ashok Kumar Sharma)  
ADG (Log) BSF



(Rajnish Kumar), PSO (E)  
BPR&D



(Surender Singh)DC  
CRPF



(R K Meel), DC  
CISF



(SI/AM Brajesh Bhardwaj)  
BSF



(Gagan Bhardwaj), AC  
SIW, BSF



(Insp/Comn Chhitar Mal)  
SSB



(Insp/Tele Thakar Ram)  
ITBP



(SI/RM Subhash)  
SIW, BSF

Approved/Not approved

10/2/19

(Rajni Kant Mishra)  
Director General  
Border Security Force