

Instek Digital™ DS2300-IP series storage systems deliver among the best cost to performance ratios for SMB users of all currently available entry-level RAID solutions. Every model includes four 1Gb/s iSCSI ports per controller to expand networking and connectivity – an architecture created with surveillance applications in mind, which need fast interconnect to multiple clients. Up to 324 drives may be attached via JBOD enclosures to each system.

Instek Digital™ DS2300-IP systems support as many as 324 drives through compatible expansion enclosures. Scalability is a much more cost effective solution than buying additional storage systems, resulting in additional savings.

While affordable for smaller businesses, Instek Digital™ DS2300-IP series offers enterprise-grade data services such as snapshot and volume copy/mirror to make multiple backups simple and quick. Thin provisioning helps with intelligent storage capacity utilization, while optional automated storage tiering is just the solution you need to leverage high speed disk drives for your most frequently-used data. Remote replication offers a secure and dependable solution for disaster recovery by creating offsite backups that stay intact and operational even if your main location has to go offline.

Instek Digital™ DS2300-IP systems share the build logic of other Instek Digital™ products, with hot-swappable hard-disc drive and power supplies/fans. Components can be effortlessly installed, maintained and upgraded without shutting down the system. They all snap into place with plug and play convenience, and do not require complex assembly.

Instek Digital™ DS2300-IP series features 80 PLUS power supplies plus smart disk drive and cooling fan spin-down to deliver stable, reliable and efficient service, while its powerful and lower-draw SoC (system on a chip) processor helps users get more done in less time. The net result is storage systems that deliver top-notch performance while helping lower utility bills and minimize the ecological footprint of SMBs.



Key Features

- All systems feature four 1Gb/s iSCSI port to ensure more than sufficient connectivity to clients, servers and other storage arrays
- Compatible with a wide range of Instek Digital™ JBOD 2300 series expansion enclosures, high density 3U 16-bay, 4U 48-bay and 6U 60-bay units
- Include licenses for snapshot, volume copy/mirror and thin provisioning
- Web Configuration
- User interface integrates all system functions to promote full utilization
- Energy efficient components include SoC processor and 80 PLUS power supplies
- Intelligent drive and fan spin down minimize redundant energy consumption
- Host board optional

INSTEK DIGITAL

Instek Digital is a video surveillance business unit of Good Will Instrument Co., Ltd. and focus on the development of high quality digital surveillance solutions. The company inherited over 20-years of surveillance experience. Instek Digital has the luxury of a strong financial background supported by Good Will Instrument Co., Ltd. – has over 40-years of electronics R&D and manufacturing experience. And Good Will Instrument Co., Ltd. is also listed on the Taiwan Stock Exchange.

Instek Digital offers a wide array of video surveillance software and hardware – under the brand of Instek Digital. The core design are based on the following principles; “User-Friendliness”, “Scalability” and “Reliability”. Instek Digital’s solutions are based on an open platform – creating seamless third party integration. With this concept Instek Digital has created a business model that can meet every aspect in today’s surveillance demand. The results speak for themselves – based on small and large projects that we have deployed around the world.

Model	HR-DS2324R-IP	HR-DS2324-IP	HR-DS2316R-IP	HR-DS2316-IP	HR-DS2312R-IP	HR-DS2312-IP
Form factor	4U rack-mountable		3U rack-mountable		2U rack-mountable	
Hard-disc drive bays	24		16		12	
Max. drives (via expansion enclosures)	324		316		312	
Drive connectivity	6Gb/s SAS connectivity					
	S.M.A.R.T. support					
	automatic bad-sector reassignment					
	dedicated bandwidth to each connected drive					
Host board support	HR-HB2304-1G / HR-HB2302-10G					
Supported drives	3.5" 7,200 RPM SATA drives*- 1TB, 2TB, 3TB, 4TB, 5TB ⁴ , 6TB ⁴ , 8TB ⁴					
RAID functionality	global, dedicated or enclosure hot-spare					
	RAID levels supported: RAID 0, 1(0+1), 3, 5, 6, 10, 30, 50, 60					
	online expansion by:		adding new drives			
			copying and replacing drives with drives of larger capacity			
			RAID migration			
			configurable stripe size and write policy per system			
	intelligent drive handling:		in degraded mode: skips irreparable blocks to continue rebuild			
			in normal operation: data-block verification and repair			
Green design	80 PLUS-certificied (more than 80% energy efficient)					
Availability and reliability	redundant, hot-swappable hardware modules					
	CacheSafe technology					
	device mapper support					
Notification	various event notification methods incl. e-mail, LAN broadcast, fax, SNMP trap and SMS					
Management	web-based SANWatch management software					
	automated cache flush and caching mode operation per enclosure status					
	telnet and SSH system monitoring via ethernet					
	platform-independent firmware management GUI					
	module status LED indicators: component presence detection & thermal sensores via I2C bus					
Power input	AC 100 ~ 240V					
PSU	2 x 460W					
Operating temperature	0 ~ 40C°					
Humidity	max. 90%, non-condensing					
Dimensions (WxDxH mm)	448 x 500 x 175		448 x 500 x 130		488 x 500 x 88	
Weight (kg)	27.5		21.8		13.6	

1) The actual video display performance may vary according to type of camera(s) and lighting condition.

2) Product specifications and availability are subject to change without notice.

3) Instek Digital is a registered trademark of Good Will Instrument Co., Ltd.

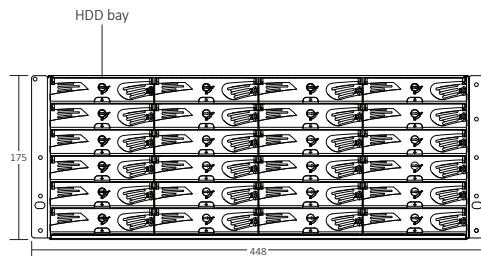
4) Single controller only.

For the latest compatibility details, please contact our sales representatives.

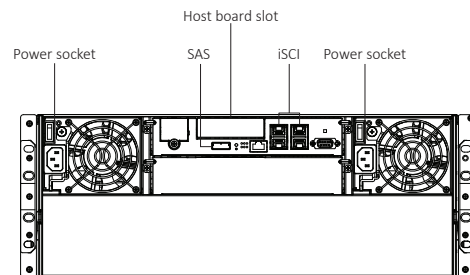
Models: Details:

HR-DR2324-IP	single controller	1 x 6Gb SAS expansion	4 x 1Gb iSCSI ports	host board slot
HR-DR2324R-IP	dual controller	2 x (1 x 6Gb SAS expansion)	4 x 1Gb iSCSI ports	host board slot
HR-DR2316-IP	single controller	1 x 6Gb SAS expansion	4 x 1Gb iSCSI ports	host board slot
HR-DR2316R-IP	dual controller	2 x (1 x 6Gb SAS expansion)	4 x 1Gb iSCSI ports	host board slot
HR-DR2312-IP	single controller	1 x 6Gb SAS expansion	4 x 1Gb iSCSI ports	host board slot
HR-DR2312R-IP	dual controller	2 x (1 x 6Gb SAS expansion)	4 x 1Gb iSCSI ports	host board slot

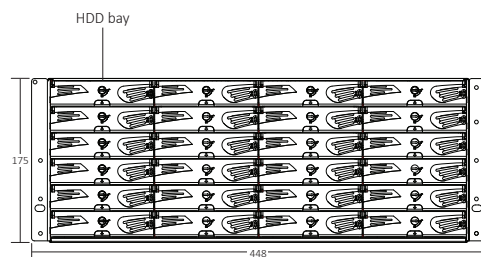
Front View | DS2324-IP



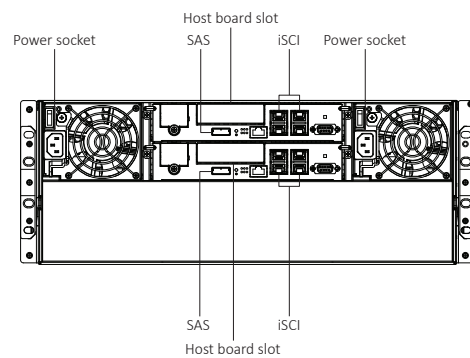
Rear View | DS2324-IP



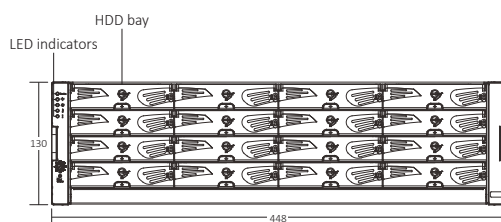
Front View | DS2324R-IP



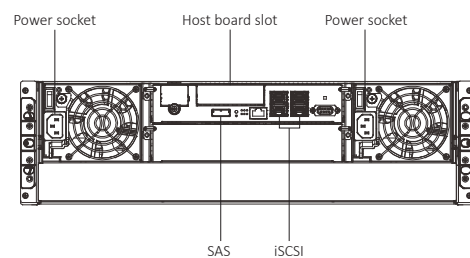
Rear View | DS2324R-IP



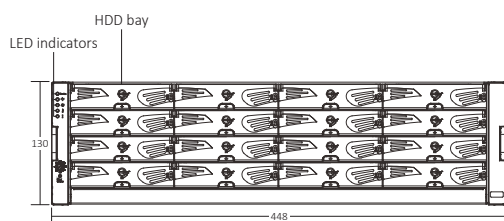
Front View | DS2316-IP



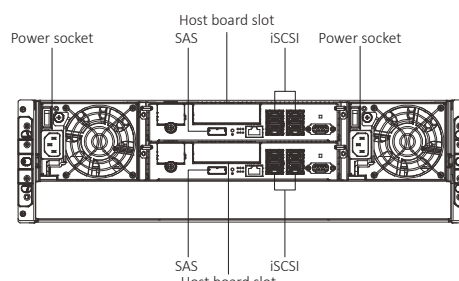
Rear View | DS2316-IP



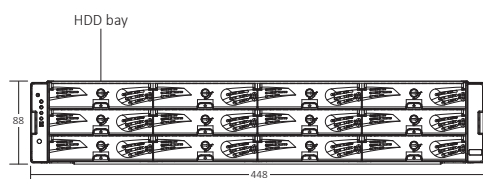
Front View | DS2316-IP



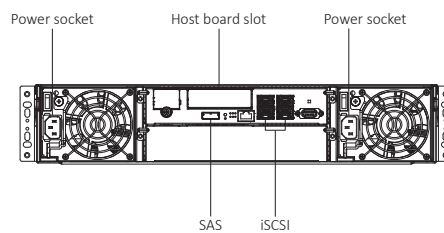
Rear View | DS2316R-IP



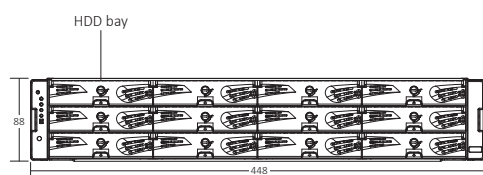
Front View | DS2312-IP



Rear View | DS2312-IP



Front View | DS2312R-IP



Rear View | DS2312R-IP

