# DVR1604HF-U

## TANDÉR®

### IP 4/8/16CH / Analog 16CH 2U Hybrid DVR

**Dual Core Processor**
**16CH Analog**
**4/8/16CH IP**
**H.264/MPEG4**
**D1** Max 400/480fps
**1080P** IP: Max 100/120fps
**eSATA**
**Max 36TB**
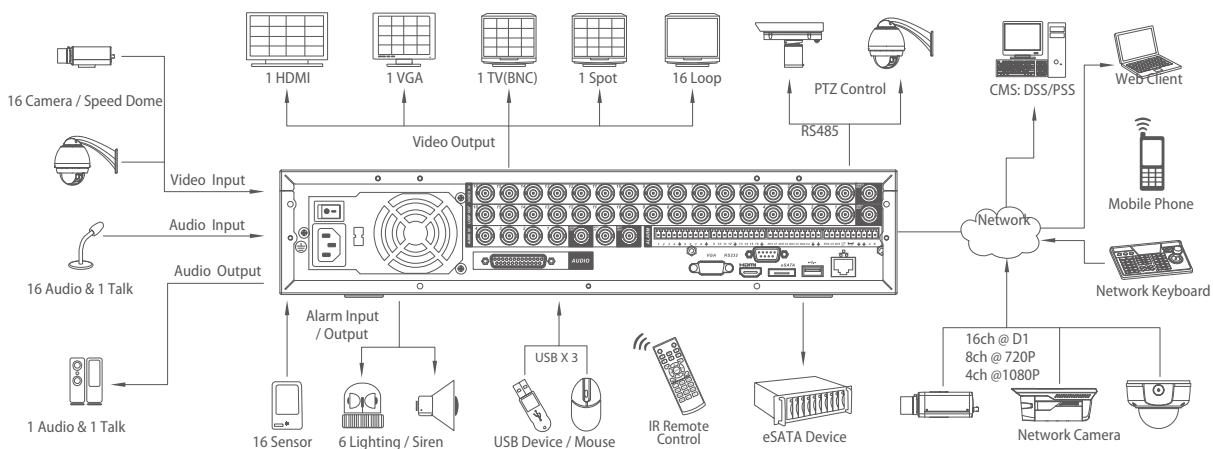**1080p** HDMI / VGA
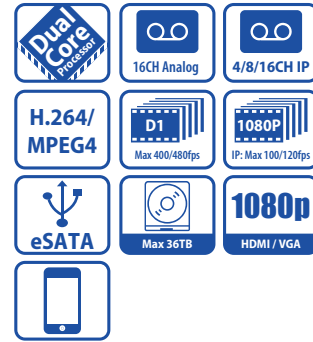
## Model

**DVR1604HF-U:** 16 channel@D1 / 8 channel@720P / 4 channel@1080P IP camera inputs; 16 channel video inputs with full D1 recording, 16 channel audio inputs, 16 channel loop outputs and 1 channel spot output with multi split display, It can support HDMI, VGA, USB2.0, 8 HDDs and eSATA

## Features

- 4/8/16 channel IP and 16 channel analog 2U Hybrid NDVR
- Dual-core CPU presents the powerful preview, recording, playback and network performance
- Up to 20/24/32 channel with1080P realtime live view
- H.264/MPEG-4 decoding & H.264 dual-stream encoding
- IP: 16 channel@D1, 8 channel@720P, 4 channel@1080P realtime recording
- Analog: 4/8/16 channel@D1(4CIF) realtime recording
- All channel simultaneous realtime playback, GRID interface & smart search
- Support Multi-brand network cameras such as: TANDER, Arecont Vision, AXIS, Canon, Dynacolor, Panasonic, SAMSUNG, SANYO, SONY and ONVIF
- Support remote network camera encoding setting & image adjust
- IP Search feature to auto discover network cameras
- Smart video detection: MD, camera blank, video loss
- Easy backup: USB/eSATA devices, CD/DVD-RW & network download
- Alarm triggering screen tips, buzzer, PTZ, e-mail & FTP upload
- Support 8 SATA HDDs up to 24TB, 1 eSATA up to 12TB, 4 USB2.0

## System Connection



16 Camera / Speed Dome
1 HDMI
1 VGA
1 TV(BNC)
1 Spot
16 Loop
PTZ Control
CMS: DSS/PSS
Web Client
Video Output
RS485
Video Input
Audio Input
Audio Output
16 Audio & 1 Talk
Network
Mobile Phone
Network Keyboard
1 Audio & 1 Talk
Alarm Input / Output
USB X 3
16 Sensor
6 Lighting / Siren
USB Device / Mouse
IR Remote Control
eSATA Device
16ch @ D1
8ch @ 720P
4ch @1080P
Network Camera

# Specifications

| Model | DVR1604HF-U |
|---|---|
| **System** | |
| Main Processor | High performance Dual-core embedded microprocessor |
| Operating System | Embedded LINUX |
| System Resources | Pentaplex function: live, recording, playback, backup & remote access |
| Control Mode | Front panel, USB mouse, IR remote control, Keyboard, Network |
| **Video** | |
| IP Camera Input | 16 channel@D1 / 8 channel@720P / 4 channel@1080P |
| IP Camera Supported List | TANDER, Arecont Vision, AXIS, Canon, Dynacolor, Panasonic, SAMSUNG, SANYO, SONY, ONVIF |
| Analog Camera Input | 16 channel, BNC(1.0Vp-p, 75O) |
| Standard | NTSC(525Line, 60f/s), PAL(625Line, 50f/s) |
| Output | 1 HDM(video & audio)I, 1 VGA, 1 TV, 1 Spot, BNC(1.0Vp-p, 75Ω) |
| Loop Output | 16 channel |
| **Audio** | |
| Input | 16 channel, BNC(200-2800mV, 30KO) |
| Output | 1 channel, BNC(200-3000mV, 5KΩ) |
| Bidirectional Talk | 1 channel Input, BNC(200-2800mV, 30KΩ), 1 channel Output, BNC(200-3000mV, 5KΩ) |
| **Display** | |
| Display Split | 1/4/8/9/16 |
| Spot Split | 1/4/8/9/16 |
| Resolution | 1920×1080, 1280×1024, 1280×720, 1024×768 |
| Tour Display | Support |
| Privacy Masking | 4 self-defined four-sided zones for privacy masking for each camera |
| OSD | Camera title, time, video loss, camera lock, motion detection, recording |
| **Recording** | |
| Video/Audio Compression | H.264 / MPEG4 / G.711 |
| Recording Resolution | 1080P(1920×1080) / 720P(1280×720) / D1 (704×576/704×480) / HD1(352×576/352×480) / 2CIF(704×288/704×240) / CIF(352×288/352×240) / QCIF(176×144/176×120) |
| Recording Speed | IP: Max 480fps@D1 / 240fps@720P / 120fps@1080P<br>Analog: Max 400/480fps@D1 + 400/480fps@CIF |
| Recording Bit Rate | IP: 32~8192 Kb/s, Analog: 32~4096Kb/s |
| Recording Quality | CBR, VBR(1~6 level, level 6 is the best) |
| Recording Mode | Manual, Schedule(Regular(Continuous), MD(Video detection: Motion detection, Camera blank, Video loss), Alarm), Stop |
| Recording Priority | Manual >Alarm >MD >Regular |
| Recording Interval | 1~120 min. (default: 60 min.), Pre-record: 1~30 sec., Post-record: 10~300 sec. |
| **Video Detection & Alarm** | |
| Trigger Events | Recording, PTZ movement, Tour, Alarm, Email, FTP, Spot, Buzzer & Screen tips |
| Motion Detection | Zones: 396(22×18), Sensitivity: 1~6 (level 6 is highest) |
| Video Loss & Camera Blank | Support |
| Alarm Input | 16 channel |
| Relay Output | 6 channel |
| **Playback & Backup** | |
| Playback Channel | 1/2/4/All |
| Search Mode | Time/Date, Alarm, MD & Exact search (accurate to second), Smart search |
| Playback Functions | Play, Pause, Stop, Rewind, Fast play, Slow play, Next file, Previous file, Next camera, Previous camera, Full screen, Repeat, Shuffle, Backup selection, Digital zoom(any size) |
| Backup Mode | Flash drive/ USB HDD/ USB CD&DVD-RW / eSATA Device / Built-in SATA burner/ Network download |
| **Network** | |
| Ethernet | RJ-45 port (10/100M/1000M) |
| Network Functions | HTTP, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPOE, DDNS, FTP, Alarm Server, IP Search(Support TANDER IP camera, DVR) |
| Max Remote Users | 20 Users simultaneously |
| Remote Operation | Monitor, PTZ control, Playback, System setting, File download, Log information |
| **Hard Disk** | |
| Hard Disk | 8 SATA ports, 8 HDDs or 6 HDDs + 1 CD/DVD-RW, Up to 24TB |
| eSATA | 4 External SATA ports, up to 12TB |
| Space Occupation | Audio: 28.8MB/H, Video: 56~3600MB/H |
| HDD Management | HDD Group, HDD hibernation technology, HDD faulty alarm & Raid(Redundancy) |
| **Auxiliary Interface** | |
| USB Interface | 3 USB2.0 ports, For mouse control & backup |
| RS232 | Dahua keyboard, PC communication |
| RS485 | PTZ control |
| **Environmental** | |
| Power Supply | AC 100~240 V, 50/60 Hz |
| Power Consumption | 40W |
| Working Environment | -10 ~+55℃ / 10~90%RH / 86~106kpa |
| Dimension | 2U, 440mm×460mm×89mm(W×D×H) |
| Weight | 6.5KG(without HDD) |