IDEAL NETWORKS

Datasheet for SecuriTEST IP

Interfaces

Ethernet port:

- Ethernet 100/1000Base-T - LAN/Network/Camera test (100Base-T), RJ45 cable TDR test (1000Base-T)

RJ45 port:

- PoE IN - Pass-through PoE to the Ethernet port only no data pass through.
- Cable test - Cable test only No Ethernet, no network connection.

Wi-Fi:

- Built in Wi-Fi 802.11b/g/n (2.4GHz only) up to speed 150Mb/s client to access the network for testing.

Coax port:

- BNC (f) video IN/HD Coax IN – Analogue, TVI, CVI, AHD input
- BNC (f) video out – Analogue video bar output

RS485 port: RS485 male "Phoenix" type connector for PTZ control and communications test

HDMI port:

- HDMI IN:
  - HDMI supports: 720×480p /720×576p /1280×720p /1920×1080p /1024×768p/1280×1024p /1280×900p /1440×900p video formats.
  - Does not support HDCP copy protected video sources
- HDMI OUT: 1 channel HDMI output1280x720p, 1920x1080p user selectable.

Audio port:

- Audio IN: 3.5mm female socket for audio line in
- Audio Out: 3.5mm female socket for audio line out

DC output: 4.0x1.7mm female socket for 12V/2A DC output (centre positive polarity)

USB port: Type A USB on 5V/2A DC power output only (No data transfer)

SD card slot: MicroSD card reader

DC input: 12V DC charge port with 5.5x2.1mm socket. Tester can operate and charge battery simultaneously.

LED Indication

Battery:

- ON - charging,
- OFF - fully charged when charge LED ON (12V DC plugged in) or
- OFF - no charging when charge LED OFF (12V DC not plugged in)

Flash - battery switch is OFF or no battery fitted (charge LED is ON)

- **ON** - External DC 12V IN is plugged in
- **OFF** - External DC 12V IN is not plugged in

Tx & Rx:

Flash - Tx & Rx data for RS485

ON – Standby (both Tx & Rx ON)

Test functions

IP Camera Test:

- Max video input resolution: 4K (8MP).
- Codec support: MJPEG, MPEG4, H.264, H.265 (mainstream)
- ONVIF support: relevant part of profile S,Q,G
- IP address discovery & assign: auto discover static IP address of direct-connected camera or assign IP address to the camera with dynamic IP address setting (from internal DHCP server) automatically.
- Stream support: RTSP (Real Time Streaming Protocol)
- Non ONVIF and proprietary IP camera support: manual IP address, port and model selection for non ONVIF supported cameras brand including ACTi, AIPU, APD, Axis, Aebell, Arecont Vision, BILL, BM, Bestecher, Bosch, CityTech, CYZ, Changying, Colin, Costar, Dahua , DOZENY, DVO, DVSONE, Develе, Etrovision, FOKO, FORSECU, FS, Finetida, GOLBONG, GREAT, Geovision, Grandeye, HI-SHARP, Hikvision, HISIDE, HZWS, HanbangGaoKe, HawKeye, Hitron, Honewell, HuiSun, hongben, ISEC, Infinova, JETVIEW, JOOAN, JOVISION, JUAN, Jbvideo, JieGao, JingShiKang, KEDACOM, KINPUS, KeJun, KumKang, LEFOUND, LILIN, LanDunSiAn, Longse, MaxxOne, NJBESTWAY, Neitway, OSKA, PN3D, Panasonic, Pelco, PengRunDa, Pinshi, QIDUN, Samsung, SANTACHI, SHIKO,SONY, STJIATU, STYCO, Safer, SecurityTronix, Seeyou, SongXin, Sunell, SuperSight, TBTEC, TIANDY, TP-LINK, TVT, TianLong, TruVue, Uniview, VIDIACNET,VIVOTEK, VSTON,VVS-CCTV, VideoNet, Vista, WAPA, WATCHMAN, WEISKY, Woshida, XiangWei, XinLong, YH, YIDUN, YJX, YSJ, YXAF, YueTian, YunShiAn, ZKTeco, ZLD …
- PTZ, focus, aperture: Key pad and screen gesture to control of aperture, zoom, focus, pan, tilt.
- Digital zoom: Up to 20 times (subject to camera availability)
- Rapid video: One key discovery of active network cameras and access to camera setup and programming via ONVIF.

Web browser: Chrome

Analogue (CVBS) camera test:

- Video input: 1 channel analogue CVBS signal PAL & NTSC auto detection
- Video level meter: Peak video signal level, Sync signal level, Colour, Chroma level measurement
- Video output: colour bar, blue or black full screen in NTSC or PAL formats.
- Dual window display: CVBS floating on screen of IP camera test results at the same time for analogue and IP converter test monitor and troubleshooting.
- PTZ control: Supports RS485 control, Baud 600-115200bps, Compatible with more than 30 protocols such as PELCO-D/P, Samsung, Panasonic, Bosch etc. (for details see HD Coax PTZ part)
- PTZ address scan: auto detect camera's PTZ address

- **PTZ data monitoring:** Captures and analyses the command data from PTZ controller. Manual transmit of hexadecimal codes in RS485 for PTZ control testing.

HD Coax (TVI, CVI, AHD) camera test:

- **TVI:** 8MP (4K) 3840 x 2160 15 fps, 5MP 2592 x 1944P 12.5/20 fps, 4MP 2688 x 1520P 15fps; 2560 x 1440P 15/25/30 fps, 3MP 2048 x 1536P 18/25/30 fps, 2MP (1080P) 1920 x 1080P 25/30 fps, 720P 1280 x 720P 25/30/50/60 fps, UTC control/ call OSD menu
- **CVI:** 8MP (4K) 3840 x 2160 12.5/15 fps, 4MP 2560x1440P 25F/30 fps, 1080p 1920 x 1080P 25/30 fps, 720p 1280 x 720P 25/30/50/60fps, UTC control d call OSD menu
- **AHD:** 5MP 2592 x 1944P 12.5/20 fps, 4MP 2560x1440P 15/25/30 fps, 3MP 2048x1536P 18/25/30 fps, 1080p 1920x1080P 25/30fps,720P 1280x720P 25/30 fps ,UTC control d call OSD menu
- **Images:** Snapshot/view, video record/play, screenshot
- **PTZ control:**
  - **Port type - UTC** Coaxitron®:
    - PTZ - Address, pan speed, tilt speed, set & recall position
    - Menu - arrows control with address
  - **Port type - RS485:**
    - **Protocol:** ALEC, AD168(M-B), Bosch OSRD, CBC, DAT-SD, DH-YTC06, Fastrax, HD600, Hikvision, Kalatel ASC, LC-NEW, LG-MULTIX, Lilin-FAST, Lilin-MLP2, Minking A01, Minking B01, Molynx, Panasonic, Pelco D, Pelco P, Samsung, Samsung SPD, SIEMENS, SONY-EVI, Santachi, TeleEye DM2, Vcltp, Vicon, WV-CS850, YAAN, YAAN-0, YAAN-1
    - **Baud rate:** 150, 300, 600,1200,2400,4800,9600,19200, 38400,115200
    - Address, Pand & Tilt speed, Position set & Recall
- **Zoom:** Key pad control manual & digital (5x max)

Power output:

- **PoE:** DC48V PoE/PoE+, 24W max
- **DC 12V:** DC12V/2A power for IP & analogue cameras
- **DC 5V:** DC5V 2A power output via USB to charge portable devices

PoE & Voltage test

- **PoE IN:** voltage, power and pins used
- **LAN/Network:** voltage, power and pin used
- **12V DC IN:** voltage, power consumed (operating and charging power consumption)
- **12V DC OUT:** voltage, power consumed by attached device
- **PoE link check:** PD (Powered Device) port on cable Tracer/Remote Test's PoE status of link and pairs used with LED indicators for 12,36 or 45,78 pins.

Ethernet cable test:

- **Twisted-pair test:** Reports: – straight, crossed-pair, open, short and cross-over (MDI-MDIX) with Tracer/Remote.
- **RJ45 TDR test:** Length 180m (max), Resolution +/-1m; estimated attenuation (dB/100m or dB/100feet) with good, poor and bad colour status; reflection %; impedance (Ω); delay skew (when connected to 1000Mb/s network device only), pin number with pair length. Continuous and single test mode.
- **Digital Tone generator:** 4 different tone selections for cable tracing.

- **Cable trace:** Trace and locate cables with the included Tracer/Remote. Digital tone technology eliminates electrical noise/hum associated with traditional analogue tracing probes. Eight (8) volume levels,

  headphone jack for use in noisy environments, non-conductive tip to prevent short circuits and integrated LED flashlight. Requires 2 x 1.5V AAA (LR03) batteries (not included).

IP Network test:

- **Traffic monitoring:** real-time upstream/downstream bandwidth histogram, tester IP address and link speed and full/half-duplex condition.
- **Ping:** Local & destination IP address, packet size, number of ping tests and inter-packet delay.
- **IP Scan:** Scan for active devices within selected IP address range (subnet). Scan selected IP address for available TCP/UDP port services.
- **Port flash:** Flash the link LED on of the switch to visually identify the port to which SecuriTEST IP is connected.
- **DHCP Server:** Fully configurable DHCP server to allow dynamically configured devices to operate when a network router is not installed. Start/stop IP address range, lease time, connected client list display.
- **Trace Route:** Display IP address and delay time of up to 30 hops (routers) between device and target URL/IP address.
- **Available IP:** Create list of IP addresses and to scan for availability checking. Tester will scan each address and identify if the address is available or in use by a network device. Use to find available IP addressed when before configuring a new device with a static address.
- **Network IP Scan:** Cross-subnet IP scan on any linked network. Lists IP address of devices on multiple subnets compared to IP Scan function which only lists devices on the same subnet as the tester.

Media playback/record applications:

- **Video:** RTSP player, Video player, VLC
- **Audio:** Audio recorder, Audio player

Image capture:

- Capture still image from connected camera (can be attached to test reports).
- Record video stream from connected camera.
- Capture current tester screen.

Audio:

- **Audio IN:** 1 channel audio signal input from camera to record, listen and play via media player or audio recorder/player; 2.5 mm (1/8") connector.
- **Audio OUT:** 1 channel audio signal output to monitor audio from cameras with microphone; 2.5 mm (1/8") connector.
- **Speaker:** Internal two speakers for system indicators and audio playback from cameras or other media files.

Test report (ONVIF only): PDF format with

- Company/customer project details,
- Tester information,

- Serial number/hardware version/firmware version/software version
- Date/time set

- Date/time of test conducted

- Camera manufacturer/model/name/software version/Date & time
- Camera network configuration,
  - Link speed and duplex
  - IP/gateway/DNS/MAC addresses, subnet mask

  - Dynamic/static configuration
- Video stream information,
  - Video resolution
  - Frame rate
  - Bit rate
  - Encoding (CODEC) type
- Attach up to six (6) video still snapshot images,
- Operator's notes
- Attach company/customer logo

Quick Access Shortcut menu: Single button access to eight (8) user-selectable functions

Remote view: View tester screen on other network device using RTSP (Real Time Streaming Protocol).

Results & upgrade

JOBS: Shortcut to user storage area with folders for Audio/ Logos/ Photos/ Reports/ Screenshots/ Videos.

Single button copy all files/directories from internal JOBS folder to external SD card.

File management:

- File explorer: copy, save, delete, cut, paste, transfer to internal and external SD card
- FTP: results to be accessed and managed via FTP with tester configured as a server or client.
- MicroSD card: transfer results to other devices or install software updates.

Upgrade: Auto & manual updates from microSD card.

Help

Video introduction: a quick video clip for basic operation introduction

User guide: Context sensitive on-line help

Quick reference guide: a quick reference guide for starting to operate the tester

FAQ: a list of commonly asked questions regarding to tester operation.

General

Display:

- **Screen:** 7 inch capacitive touch screen with 1920x1200 resolution (324 ppi).
- **Screen locking:** user password setting for secured tester access.
- **Screen rotation:** rotating screen for ceiling camera adjustment before mounting.
- **Sleep timer:** 1-30 min, disengage.

Storage: 10GB internal SD card, 8GB external microSD card included (supports up to 16 GB).

Date & Time: Date, Time & time zone selection, 24 hours format, manual and auto sync.

Power: Charger: input 110-240VAC, 50/60Hz, 0.6A; output 12VDC, 2A, centre pin positive polarity; US, UK, EU, Australia AC plug adapters.

Battery:

- **Capacity:** Field user exchangeable 7.4V Lithium polymer battery, 5000mAh, 37Wh
- **Operation time:** 10 hour (typical) continuous operation without external PoE/DC12V load; 4.5hours (typical) with 3.5 watt PoE camera load.
- **Charge time:** < 8 hours from empty.

Language: English, French, German, Spanish, Italian, Portuguese, Chinese

Length units: meter, feet

Operating Temperature: -10°C---+50°C / 50° F---122°F

Operating Humidity: 30%-90%

Dimension 252 mm x 160 mm x 48 mm/ 10.0 in x 6.3 in x 1.9 in (approximate)

Weight: 1.0 Kg/2.2 lbs (including battery)

Standard compliance

CE RED directive:

- EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013
- EN 301 489-1 V1.9.2 (2011-09)
- EN 301 489-17 V2.2.1 (2012-09)
- EN 300 328 V1.9.1 (2015-02)
- EN 62479:2010

FCC:

- FCC Part 15 Subpart B

RoHS:

- EN62321:2012
- EN 14372:2004
- EPA 3540:1996

Tone Tracer/Remote CE directive:

- EN55032:2015
- EN61000-3-2:2014
- EN61000-3-3:2013
- EN55024:2010+A1:2015

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