

AI / GPU CLUSTER
HIGH-DENSITY • LIQUID-READY

400G SPINE-LEAF
FABRIC • SDN

ZERO-TRUST CORE
NCA ECC • SOC 24/7

EDGE • 5G • IoT
CONVERGED NETWORK

ICT SYSTEMS INTEGRATOR • DATA CENTERS • NETWORKS • ELV

Engineering the intelligent infrastructure of tomorrow.



AI

GPU • LLM • VISION



5G

PRIVATE • Wi-Fi 7



CLOUD

HYBRID • PRIVATE



ZERO TRUST

SASE • SOC 24/7



IoT / OT

DIGITAL TWIN



EDGE DC

TIER III • LIQUID

[00] LEADERSHIP

Infrastructure is now strategy.

AI workloads, sovereign cloud, private 5G and city-scale IoT are reshaping what clients expect from the infrastructure beneath them. The network is no longer a utility; it is the platform every service, sensor and decision runs on.

AHD was built for this moment. We combine construction-grade delivery with deep systems integration and round-the-clock operations, so that what we design on paper performs in the real world, securely, for years.

Chairman — AHD Technology

Contents

INDEX // 30 SECTIONS • 33 PAGES

01 Who We Are	03	17 ELV: Telecom & Standards	19
02 At a Glance	04	18 UC, Digital & Consulting	20
03 Vision, Mission & Values	05	19 Technology Radar	21
04 Reference Architecture	06	20 Delivery Methodology	22
05 Practice Portfolio	07	21 Industries & Compliance	23
06 Networks & Telecom	08	22 Support & Escalation	24
07 Data Center & AI Infrastructure	09	23 Solution Blueprints	25
08 Cybersecurity	10	24 Trusted By	26
09 Cloud & Managed Services	11	25 Technologies: IT Stack	27
10 AI & Data	12	26 Technologies: Infra, ELV & AV	28
11 Enterprise Apps & BI	13	27 People & Certifications	29
12 Smart Cities & Buildings	14	28 Facilities & Tools	30
13 ELV / Low Current: Overview	15	29 Why AHD & Organization	31
14 ELV: Security Systems	16	30 Governance & ESG	32
15 ELV: Life Safety & Comms	17	— Contact	33
16 ELV: Automation & AV	18		

[01] WHO WE ARE

A full-stack ICT integrator, from fiber to AI.

AHD Technology designs, builds, secures and operates the digital infrastructure behind government entities, giga-projects, campuses and enterprises across Saudi Arabia, Egypt, Bahrain, Oman and the UK.

Our engineers work across every layer of the stack: passive infrastructure, high-performance networks, AI-ready compute, zero-trust security and the IoT and data platforms that turn infrastructure into intelligence.

Capability matrix

12 PRACTICES × FULL LIFECYCLE

PRACTICE	CONSULT	DESIGN	BUILD	OPERATE
Networks & Connectivity	●	●	●	●
Telecom & Wireless (DAS, 5G)	●	●	●	●
Data Center & AI Infrastructure	●	●	●	●
Cybersecurity	●	●	●	● SOC
Cloud & DevOps	●	●	●	●
AI & Data	●	●	●	●
Smart Cities & IoT	●	●	●	●
ELV & Intelligent Buildings	●	●	●	●
UC, AV & Collaboration	●	●	●	●
Digital Platforms & Software	●	●	●	●
Managed Services (NOC / SOC)	○	●	●	● 24/7
Consulting & Digital Engineering	●	●	○	○

OPERATING MODEL · ONE TEAM, FULL LIFECYCLE

CONSULT

Strategy & master plan

DESIGN

BIM & architecture

BUILD

Install & integrate

OPERATE

NOC / SOC 24/7

EVOLVE

Upgrade & innovate

HEADQUARTERS
Riyadh, KSA

ESTABLISHED
2023

CERTIFICATIONS
65

WORKFORCE
40 staff · 10 engineers

CERTIFIED ENGINEERS
10

PRESENCE
KSA · Egypt · Bahrain ·
Oman · UK

[02] AHD AT A GLANCE

Proven scale. Integrated capability.

KPI.01

2023Established ·
Riyadh

KPI.02

36Projects delivered ·
36 clients

KPI.03

65Professional
certifications · 40
staff

KPI.04

100+Technology
partners

Five practice groups, one integrated partner

STACK VIEW

P/05

Enterprise Applications

Portals, apps, ERP and process automation

P/04

Data, AI & Emerging Tech

Analytics, AI, IoT and smart-city platforms

P/03

Cloud & Managed Services

Scalable platforms, kept running under SLA

P/02

Cyber Security

Protecting data, systems and operations

P/01

Network, Data Center & ELV

The foundation: connectivity, facilities and building systems

Service models for every stage



ADVISE

Consultancy

Strategy, assessments and
technical specifications

BUILD

Professional services

Design, implementation and
integration

GOVERN

Project management

PMO governance, scheduling and
reporting

RUN

Managed services

Your IT run by us, under clear SLAs



SUSTAIN

Operations & maintenance

Keeping critical systems healthy



ENABLE

Training

Enabling client teams to own their
systems

[03] VISION · MISSION · VALUES

What drives us

> VISION

To be the most trusted technology partner building the intelligent digital infrastructure of the Kingdom and the region.

> MISSION

To design, deliver and operate secure, AI-ready and scalable ICT infrastructure to international standards, powered by qualified national talent and backed by long-term service commitments.

Core values

OPERATING PRINCIPLES

VAL-01

Reliability

Five-nines thinking in every design decision.

VAL-02

Precision

Every link tested, every asset documented.

VAL-03

Secure by design

Zero-trust principles from the first drawing.

VAL-04

Innovation

Emerging tech, adopted when it is ready.

VAL-05

Partnership

Accountable long after handover.

Enabling Saudi Vision 2030

NATIONAL DIGITAL PRIORITIES

01 / DIGITAL GOVERNMENT

Resilient networks, sovereign hosting and secure platforms for public services.

02 / GIGA-PROJECTS

City-scale fiber, IoT and command centers for new destinations and smart communities.

03 / AI & DATA ECONOMY

AI-ready data centers and data platforms aligned with national data governance.

04 / LOCAL TALENT

Developing Saudi engineers and prioritising local content across the supply chain.

[04] AHD REFERENCE ARCHITECTURE

One integrated stack, six layers deep.

Every AHD engagement maps to this blueprint, so that each layer we deliver is ready to connect to the next, secured end to end and operated as one system.



◆ OPEN STANDARDS

Multi-vendor, standards-based integration avoids lock-in.

◆ SECURE END TO END

Security is a vertical, not a layer: it spans the full stack.

◆ OPERATED AS ONE

Unified monitoring across every layer we deliver.

[05] PRACTICE PORTFOLIO

Twelve practices. One integrated team.



NET-01

Networks & Connectivity

Spine-leaf · SD-WAN · Wi-Fi 7
· XGS-PON



TEL-02

Telecom & Wireless

Private 5G · DAS / IBS ·
Microwave · OSP



DCI-03

Data Center & AI Infrastructure

GPU racks · Liquid cooling ·
HCI · DCIM



SEC-04

Cybersecurity

Zero Trust · XDR · SOC · OT
security



CLD-05

Cloud & DevOps

Sovereign cloud · Kubernetes
· IaC · DRaaS



AID-06

AI & Data

GenAI · Computer vision ·
Lakehouse · MLOps



IOT-07

Smart Cities & IoT

IOC · Digital twin · LoRaWAN
· NB-IoT



ELV-08

ELV & Intelligent Buildings

AI CCTV · ACS · PSIM · PoE
lighting



UCX-09

UC, AV & Collaboration

UCaaS · AI contact center ·
AV-over-IP



DGT-10

Digital Platforms & Software

ERP · Low-code · APIs · GIS



MSP-11

Managed Services

24/7 NOC · SOC · AI0ps · SLA



CNS-12

Consulting & Digital Engineering

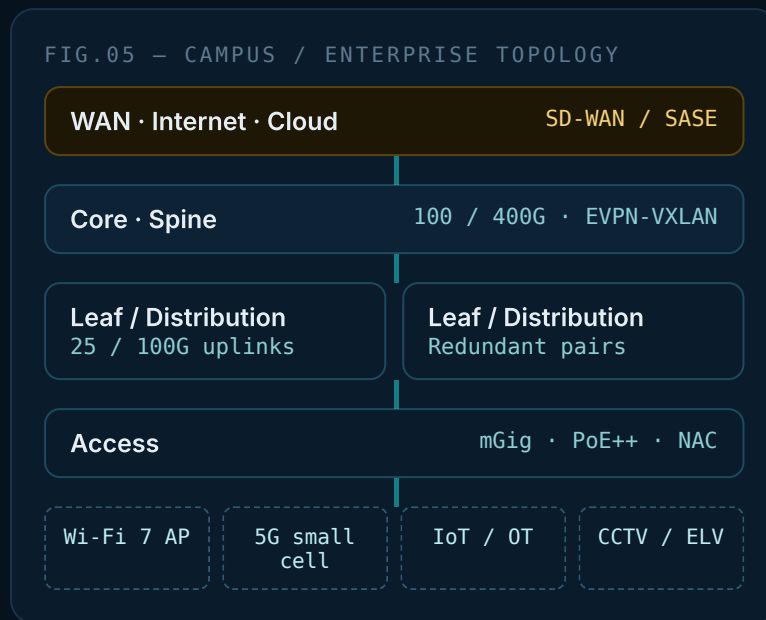
ICT master plan · BIM · BOQ ·
PMC

[06] NETWORKS • TELECOM • WIRELESS

High-performance networks, wired and wireless.

Converged, automated and secure networks engineered for AI traffic, dense IoT and multi-gigabit users, from the outside plant to the access point.

FIG.05 – CAMPUS / ENTERPRISE TOPOLOGY



SPEC SHEET

BACKBONE	100G / 400G Ethernet
FABRIC	Spine-leaf, EVPN-VXLAN
WIRELESS	Wi-Fi 7 · 6 GHz
CELLULAR	Private 5G SA · DAS
FIBER	OS2 · XGS-PON · DWDM
COPPER	Cat6A · TIA-568
OPS	Intent-based · AI0ps
PROTOCOL	IPv6-ready dual stack

Enterprise & campus networks

- › Data center and campus fabrics with zero-touch provisioning
- › SD-WAN and SASE for branches and remote sites
- › High-density Wi-Fi 7 for stadiums, campuses and hotels
- › Network access control and micro-segmentation
- › NetDevOps automation and AI-driven assurance

Telecom & wireless infrastructure

- › Private 5G / LTE for ports, plants and campuses
- › Multi-operator DAS and in-building coverage (IBS)
- › OSP: ducts, manholes, long-haul and FTTx / XGS-PON
- › Microwave, E-band and satellite backhaul
- › Tetra / critical communications integration

FIG.05B – NETWORK & DATA CENTER FABRIC

Redundant core, leaf-spine fabric, rack-ready.

Dual core switches mesh to every leaf, so a single failure never takes a service down.

- N+1 core
- Leaf-spine
- Structured cabling

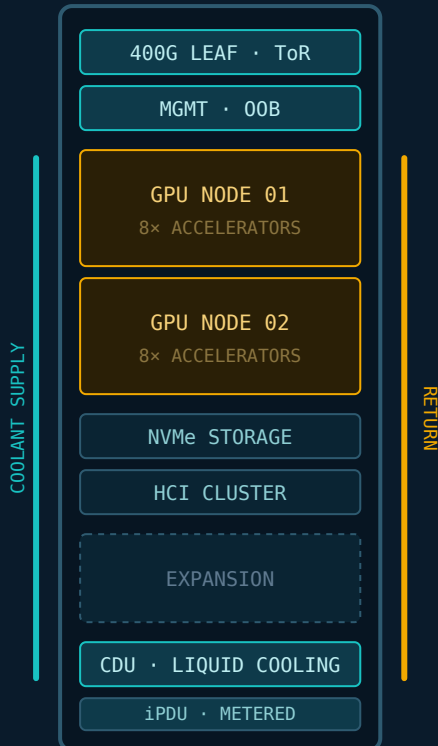


[07] DATA CENTER & AI INFRASTRUCTURE

AI-ready data centers, from edge to hyperscale.

Facilities and compute platforms engineered for the power density, cooling and low-latency fabrics that AI and accelerated workloads demand.

FIG.06 – AI RACK ELEVATION



POWER

MV/LV distribution, modular Li-ion UPS, busway, metered iPDUs, EPMS.

COOLING

Hot/cold aisle containment, in-row, rear-door heat exchangers, direct-to-chip liquid cooling.

COMPUTE

GPU clusters, HCI, software-defined storage, virtualisation and containers.

FABRIC

Lossless 400G Ethernet / InfiniBand back-end fabrics for AI training.

MONITOR

DCIM, environmental sensing, capacity planning and energy analytics.

PROTECT

VESDA, clean-agent suppression, biometric access, mantraps and CCTV.

DATA CENTER SERVICES

- › GPU / AI cluster design, build and tuning
- › DC audits, energy and capacity assessments
- › Data center migration and relocation
- › Servers, virtualisation, NAS and SAN solutions
- › Liquid-cooling retrofits for existing halls
- › Colocation and cloud-readiness programmes
- › Critical-facility operation and maintenance
- › End-user computing: device rollout at scale

AVAILABILITY

Tier III-aligned

Concurrently maintainable designs to TIA-942.

DENSITY

AI-ready racks

High-density power and liquid cooling paths.

EFFICIENCY

PUE-optimised

Free-cooling, containment and energy analytics.

SCALE

Modular & edge

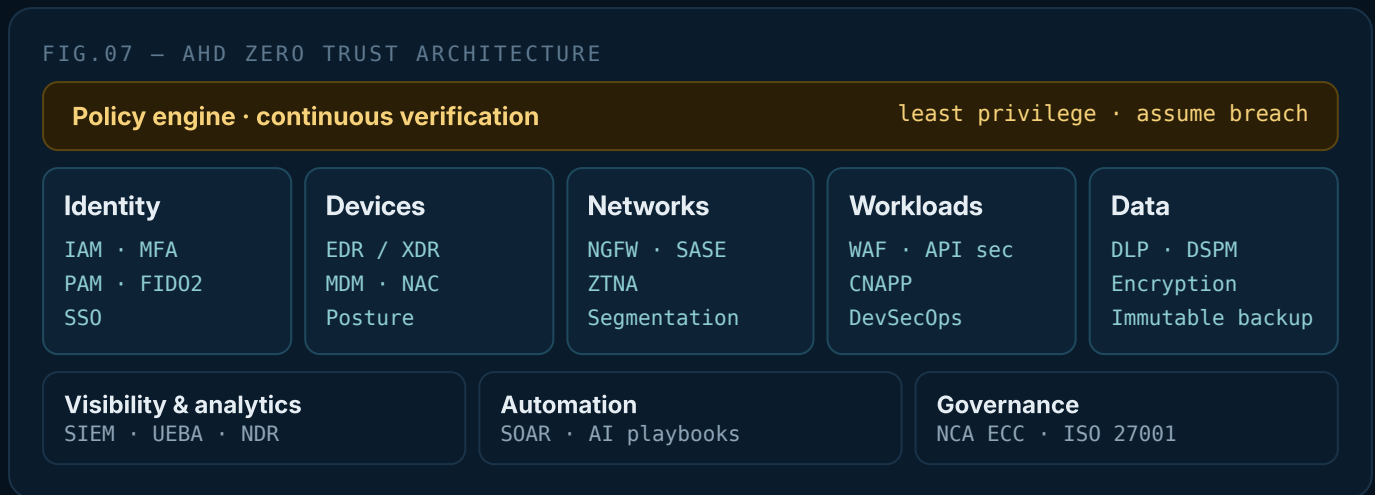
Prefabricated modules that grow with demand.

[08] CYBERSECURITY

Never trust. Always verify.

A zero-trust architecture across identities, devices, networks, workloads and data, operated by an AI-assisted security operations center and aligned with National Cybersecurity Authority controls.

FIG.07 – AHD ZERO TRUST ARCHITECTURE



Security lifecycle services



- > Vulnerability assessment & penetration testing (VAPT)
- > Red-team exercises and attack-surface management
- > OT / ICS security for utilities and industrial sites
- > Cloud security posture management
- > Compliance programmes: NCA ECC, CCC, OTCC
- > PDPL data-privacy readiness
- > Security awareness and phishing simulation
- > Post-quantum cryptography readiness roadmaps

FIG.07B – DEFENSE IN DEPTH

Layered controls around what matters most.

Perimeter, network and identity rings protect critical assets, with continuous SOC monitoring sweeping every layer.

Zero trust SOC 24/7 NCA ECC

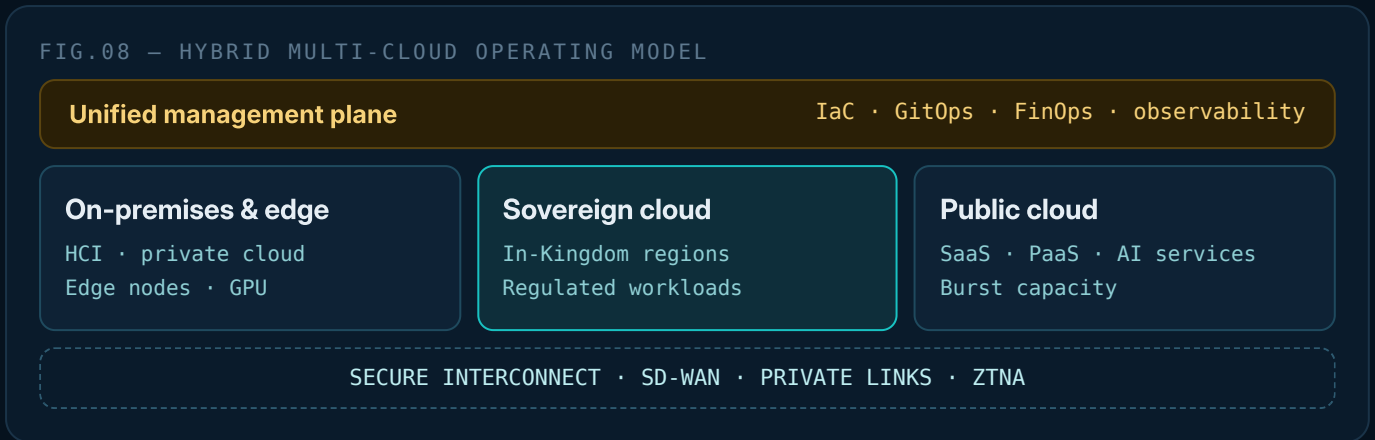


[09] CLOUD • DEVOPS • MANAGED SERVICES

Hybrid by design. Operated around the clock.

We place each workload where it performs best, on-premises, in sovereign in-Kingdom cloud or in public cloud, and run the whole estate as one.

FIG.08 – HYBRID MULTI-CLOUD OPERATING MODEL



Cloud & DevOps

- › Cloud readiness and migration factories
- › Kubernetes and container platforms
- › CI/CD pipelines and DevSecOps
- › Backup, DRaaS and cyber-recovery vaults

Managed operations

- › 24/7 NOC with AIOps event correlation
- › SOC-as-a-service and threat hunting
- › ITIL 4 service desk and resident engineers
- › Preventive maintenance and lifecycle refresh
- › Software licensing and cost-effective renewals

SERVICE MODEL	ESSENTIAL	ADVANCED	PREMIUM
Coverage	Business hours	Extended	24/7/365
Monitoring	Alerts	NOC core systems	NOC + SOC, all systems
On-site	On call	Scheduled visits	Resident engineers
Response	Per SLA	Per SLA	Priority SLA
Reporting	Quarterly	Monthly	Live dashboard

FIG.08B – CLOUD & MANAGED OPERATIONS

One control plane over every workload.

Cloud services orchestrated across on-premises and hosted platforms, with live capacity and health telemetry from the NOC.

Hybrid cloud Backup & DR NOC

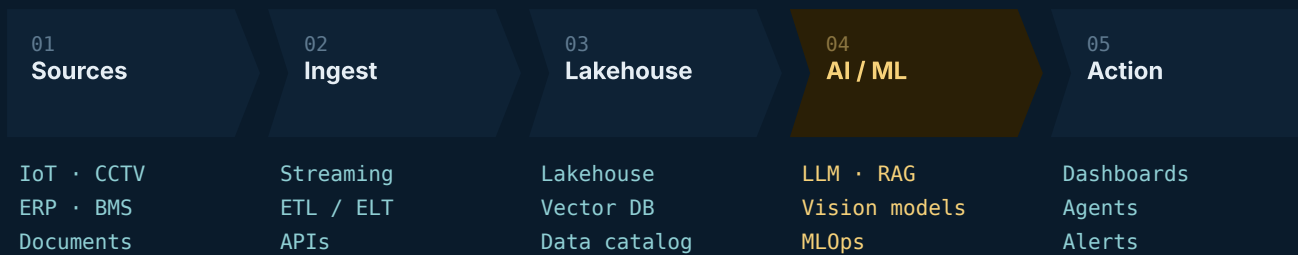


[10] ARTIFICIAL INTELLIGENCE & DATA

From infrastructure to intelligence.

The cameras, sensors and systems we install generate data. We turn it into decisions with governed data platforms and production-grade AI, in Arabic and English.

FIG.09 – AHD DATA & AI PIPELINE



AI use cases we deliver

UC-01 • VISION

Video analytics

Intrusion, crowd density, PPE and safety detection.

UC-02 • GENAI

Knowledge assistants

Arabic / English assistants grounded on your documents.

UC-03 • PREDICT

Predictive maintenance

Anticipating failures in networks, HVAC and power.

UC-04 • ENERGY

Energy optimisation

AI tuning of cooling and lighting to cut consumption.

UC-05 • DOCUMENT AI

Intelligent documents

Extraction and classification of contracts and forms.

UC-06 • AGENTS

AI operations agents

Automated triage and remediation in the NOC.

SOVEREIGNTY

In-Kingdom hosting for sensitive data and models.

PRIVACY

Designs aligned with the PDPL and SDAIA data rules.

RESPONSIBLE AI

Human oversight, evaluation and audit trails.

MLOPS

Models monitored and retrained in production.

FIG.09B – FROM DATA TO DECISIONS

Models trained on your data, measured in production.

Neural models turn operational data into predictions, while dashboards track accuracy and business impact over time.

ML / GenAI

BI dashboards

MLOps



[11] ENTERPRISE APPLICATIONS • DATA & BI

Smart applications. Data-driven decisions.

Applications that make organizations faster and more efficient, and data platforms that turn information into decisions.

Enterprise applications

P/05

01 ERP & CRM

Business systems implemented and tailored to your processes.

02 Web portals

Internal and external portals for staff and customers.

03 Mobile apps

Native and cross-platform applications.

04 Integration & APIs

Connecting new and existing systems, including government platforms.

05 UX & product design

User research, journeys and interface design.

06 Process automation

Digital workflows and RPA that replace paper and manual steps.

Data, BI & emerging tech

P/04

01 Data platforms

Data warehouses, lakes and integration pipelines.

02 Business intelligence

Analytics and executive dashboards on key metrics.

03 AI & machine learning

Predictive models, automation and generative AI.

04 IoT & smart buildings

Connected sensors, devices and building platforms.

05 Smart city

Integrated platforms for safer, efficient urban services.

06 Innovation pilots

Proofs of concept that validate new technology fast.

HOW WE BUILD SOFTWARE • FIG.11B

Agile, secure and cloud-native.

Portals, mobile apps and secure APIs on one integration layer, linked to ERP and government platforms.

Agile / Scrum

DevSecOps

Microservices

Low-code

RPA

Arabic-first UX



[12] SMART CITIES • INTELLIGENT BUILDINGS

Cities and buildings that sense, think and respond.

We connect thousands of devices into one platform and one operations center, giving operators real-time awareness and automated response.

FIG.10 – SMART CITY IoT STACK

City services • mobility • safety • utilities • tourism

Integrated Operations Center • C2 • PSIM • video wall

IoT platform & digital twin • rules • AI • 3D model

Connectivity • fiber • 5G • LoRaWAN • NB-IoT

Devices & sensors • cameras • meters • env • parking

OUTCOMES

Situational awareness. One live view of assets, incidents and people flow.

Faster response. Automated workflows from alarm to dispatch.

Lower operating cost. Predictive maintenance and energy analytics.

Better experience. Seamless access, wayfinding and services.

Intelligent building systems (ELV)

SECURITY

AI-enabled IP CCTV, VMS, access control, biometrics, intrusion and perimeter detection

LIFE SAFETY

PA / voice evacuation, fire alarm interfaces, emergency communications

BUILDING OS

BMS integration, PoE lighting, smart metering, occupancy sensing

HOSPITALITY

IPTV, guest Wi-Fi, GRMS and mobile key

HEALTHCARE

Nurse call, RTLS asset tracking, queue management

MOBILITY

Smart parking, ANPR, EV-charging integration

[13] LOW CURRENT & ELV SYSTEMS • OVERVIEW

The nervous system of every building.

We design, supply, install, test, commission and maintain the complete low-current (ELV) package for towers, hospitals, campuses, hotels, airports and giga-project destinations, converged on one IP backbone and run from one integration platform.

FIG.ELV – AHD LOW-CURRENT SYSTEM MAP

Integration & control layer

PSIM • iBMS • command center • video wall

Security & surveillance E1

CCTV • VMS • ACS • intrusion
• perimeter (PIDS) • ANPR •
UVSS • visitor mgmt • guard
tour • key mgmt • screening

Life safety E2

Addressable fire alarm •
aspirating detection • PA /
voice evacuation • EVCS /
refuge • emergency help
points • gas & leak detection

Communications E3

Structured cabling • IP
telephony / PABX • intercom &
video door • DAS / IBS • two-
way radio / TETRA • master
clock

Building automation E4

BMS • lighting control (DALI
/ KNX) • energy metering •
GRMS • smart parking • leak
detection • elevator
interface

Audio-visual & entertainment E5

IPTV • SMATV / MATV •
background music • digital
signage • meeting rooms •
auditoriums • LED walls

Specialist systems E6

Nurse call • RTLS • infant
protection • queue management
• patient entertainment •
parking guidance

CONVERGED IP BACKBONE • STRUCTURED CABLING • PoE / PoE++ • VLAN SEGMENTATION

WHY A SINGLE ELV CONTRACTOR

- › One coordinated design across all low-current trades
- › Shared containment, cabling and network: lower cost
- › Cause-and-effect tested end to end, not system by system
- › One point of responsibility for authority approvals
- › One maintenance contract after handover

TYPICAL PROJECTS

- › Residential and commercial towers
- › Hospitals and medical cities
- › Universities, schools and campuses
- › Hotels, resorts and destinations
- › Airports, stations and industrial sites

[14] ELV • SECURITY & SURVEILLANCE SYSTEMS

See everything. Control every door.

CCTV & video management

E1.1

- › IP cameras 4K, PTZ, multi-sensor, thermal
- › Enterprise VMS, failover recording, storage design
- › AI analytics: intrusion, loitering, crowd, PPE, LPR
- › Control rooms and video walls

Access control

E1.2

- › Card, mobile and biometric credentials
- › Turnstiles, speed gates, interlocks and mantraps
- › Elevator destination control integration
- › Time & attendance and HR system links

Intrusion & perimeter

E1.3

- › Intrusion detection with zoned alarm panels
- › Fence-mounted and buried PIDS, fiber sensing
- › Ground radar and microwave barriers
- › Thermal cameras with auto-tracking

Vehicle security

E1.4

- › ANPR and vehicle access management
- › Under-vehicle scanning systems (UVSS)
- › Road blockers, bollards and barriers
- › Gatehouse and checkpoint integration

Screening

E1.5

- › X-ray baggage and parcel inspection
- › Walk-through and hand-held metal detectors
- › Mail-room and loading-bay screening
- › Integration with access and CCTV events

Visitor, key & guard tour

E1.6

- › Visitor pre-registration and self-service kiosks
- › Electronic key cabinets and asset lockers
- › Guard tour patrol verification
- › Lockdown and emergency workflows

STANDARDS & COMPLIANCE

EN 62676 (CCTV)

ONVIF

EN 50131 (intrusion)

EN 60839 (access)

HCIS security directives

Client security specifications

NCA ECC (cyber-secure devices)

[15] ELV • LIFE SAFETY & BUILDING COMMUNICATIONS

When seconds matter, systems must speak.

Fire detection & alarm

E2.1

- › Addressable networked fire alarm systems
- › Aspirating (VESDA-type) and linear heat detection
- › Graphics workstation and remote monitoring
- › Civil Defense submittals and inspection support

Public address & voice evacuation

E2.2

- › EN 54-certified PA / VA with zoned paging
- › Phased evacuation and pre-recorded messages
- › Background music and announcements
- › Speech-intelligibility (STI) design and testing

Emergency communications

E2.3

- › Fire telephones and EVCS for refuge areas
- › Disabled refuge and toilet alarm systems
- › Emergency help points and SOS towers
- › Lift emergency intercom

Intercom & door entry

E2.4

- › IP video intercom for residential towers
- › Security and gatehouse intercom networks
- › Mobile-app door release and visitor calls
- › Integration with access control

Healthcare communications

E2.5

- › IP nurse call with staff mobile alerts
- › RTLS asset and staff tracking
- › Infant protection and patient wandering
- › Queue management and patient TV

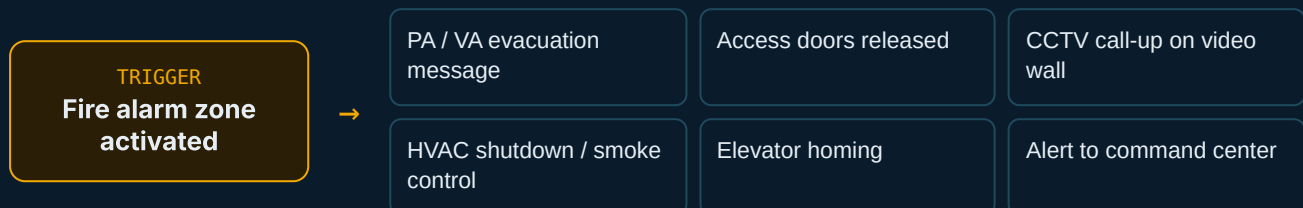
Detection & time systems

E2.6

- › Gas detection and water-leak interfaces
- › GPS / NTP master clock and slave clocks
- › Emergency lighting monitoring interface
- › Alarms routed to BMS and command center

Cause & effect: one alarm, coordinated response

FIG.ELV-2



Every interface is documented in a cause-and-effect matrix and tested end to end before handover, aligned with NFPA 72, EN 54 and the Saudi Building Code (SBC 801).

[16] ELV • BUILDING AUTOMATION & AUDIO-VISUAL

Buildings that run themselves, and spaces that engage.

Building automation & smart building

E4

Building management (BMS)

HVAC, pumps, chillers and plant monitoring and control.

Lighting control

DALI-2 and KNX scenes, daylight and occupancy control.

Energy & utility metering

Electricity, water and BTU metering with energy dashboards.

Hotel room management

GRMS for lighting, climate, DND / MUR and occupancy.

Smart parking

Bay sensors, guidance displays, payment and ANPR.

Third-party interfaces

Elevators, generators, UPS, fire and leak detection.

Audio-visual, entertainment & signage

E5

IPTV & SMATV / MATV

Headends, satellite and interactive TV for hotels, hospitals and homes.

Meeting & conference rooms

Video conferencing, wireless presentation and room control.

Auditoriums & halls

Line arrays, stage lighting interfaces, interpretation systems.

Digital signage

Centrally managed screens, kiosks and wayfinding.

LED & video walls

Fine-pitch LED for lobbies, control rooms and events.

Background music

Zoned audio for retail, hospitality and public areas.

OPEN PROTOCOLS WE INTEGRATE

BACnet/IP

Modbus TCP

KNX

DALI-2

MQTT

OPC UA

ONVIF

SIP

Dante / AV-over-IP

SNMP

Open protocols keep every system interoperable, vendor-independent and ready for the building's digital twin.

[17] ELV • TELECOM, INTEGRATION & DELIVERY

Connected, integrated and approved.

In-building telecom

E3

- › MDF / IDF telecom rooms to TIA-569
- › Copper and fiber backbone and horizontal cabling
- › IP telephony, PABX and hospitality voice
- › Multi-operator DAS / IBS and mobile coverage
- › Two-way radio / TETRA in-building coverage
- › FTTH for residential towers and compounds

Integration & command

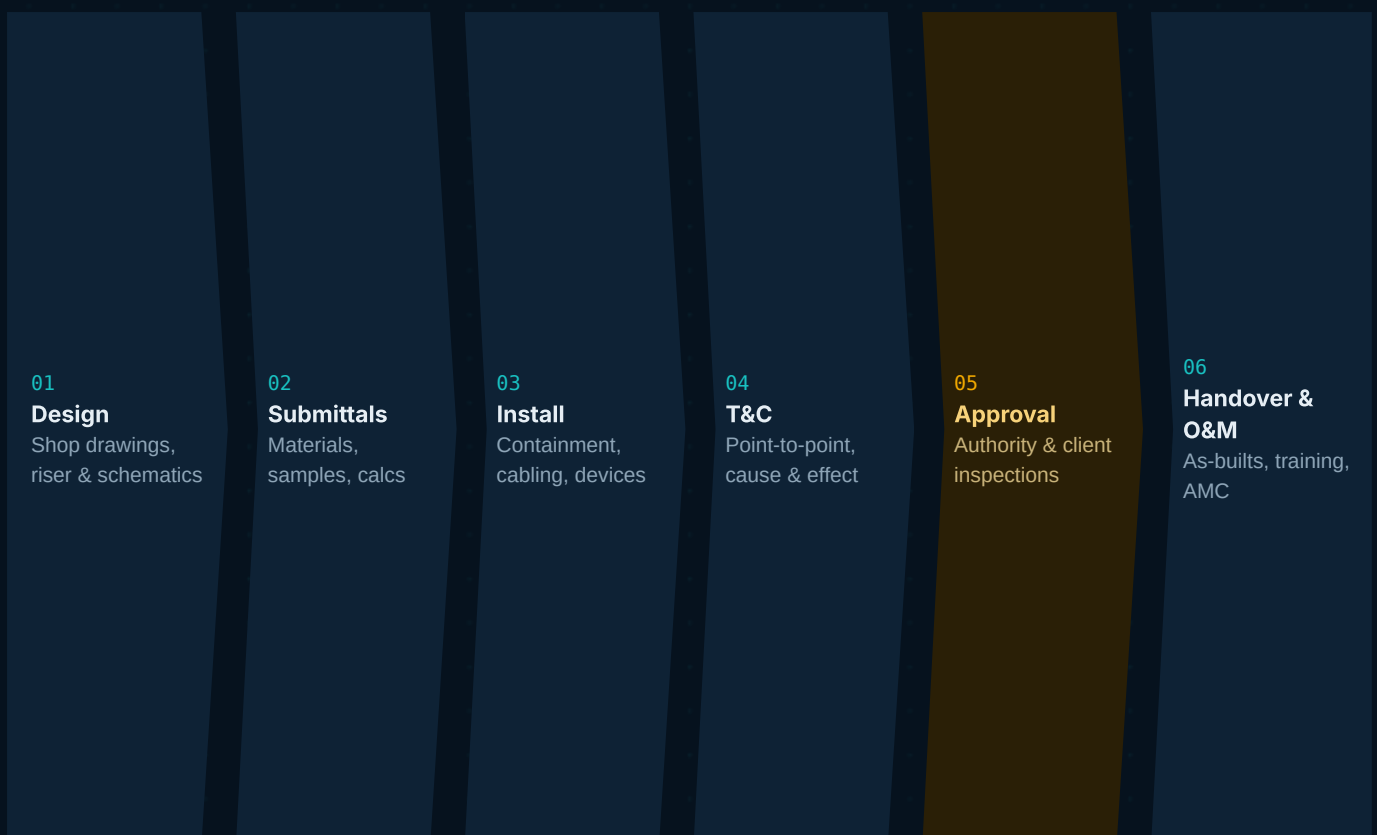
E6

- › PSIM: one console for all security systems
- › Integrated BMS (iBMS) across all building systems
- › Security and facility command centers
- › Video walls, operator consoles, SOP workflows
- › Alarm management and incident reporting
- › Data feed to digital twin and analytics

ELV standards & approvals

SYSTEM	REFERENCE STANDARDS & AUTHORITIES
Fire alarm	NFPA 72 • EN 54 • SBC 801 • Saudi Civil Defense approval
PA / voice evacuation	EN 54-16 • EN 54-24 • ISO 7240
CCTV	EN 62676 • ONVIF • HCIS directives (industrial)
Access & intrusion	EN 60839 • EN 50131
Structured cabling	TIA-568 • TIA-569 • TIA-606 • TIA-607 • ISO/IEC 11801
Mobile coverage	Mobile operator acceptance • CST requirements

ELV delivery lifecycle



[18] EXPERIENCE • SOFTWARE • ADVISORY

Where people meet technology.

UCX-09

UC, AV & Collaboration

Hybrid-work and customer-engagement platforms that make every room and every channel intelligent.

- › Cloud UCaaS and IP telephony
- › AI-powered omnichannel contact centers (CCaaS)
- › Smart meeting rooms with AI cameras and transcription
- › AV-over-IP, LED video walls and auditorium systems
- › Digital signage and interactive wayfinding

DGT-10

Digital Platforms & Software

Software that digitises operations and connects the systems we build into one data flow.

- › ERP, CRM and asset-management platforms
- › Low-code apps and workflow automation
- › Web and mobile apps, cloud-native microservices
- › API gateways and enterprise integration
- › GIS and location intelligence

CNS-12

Consulting & Digital Engineering

Getting ICT right on the model before it is built on site.

- › ICT master plans for cities, destinations and campuses
- › Concept, detailed and IFC design in BIM (LOD 300–400)
- › RF planning: Wi-Fi predictive and DAS link budgets
- › Specifications, BOQs and tender evaluation
- › Project management consultancy (PMC)

DIGITAL ENGINEERING TOOLCHAIN

BIM / Revit

AutoCAD

Wi-Fi predictive survey

DAS / RF design

Primavera P6

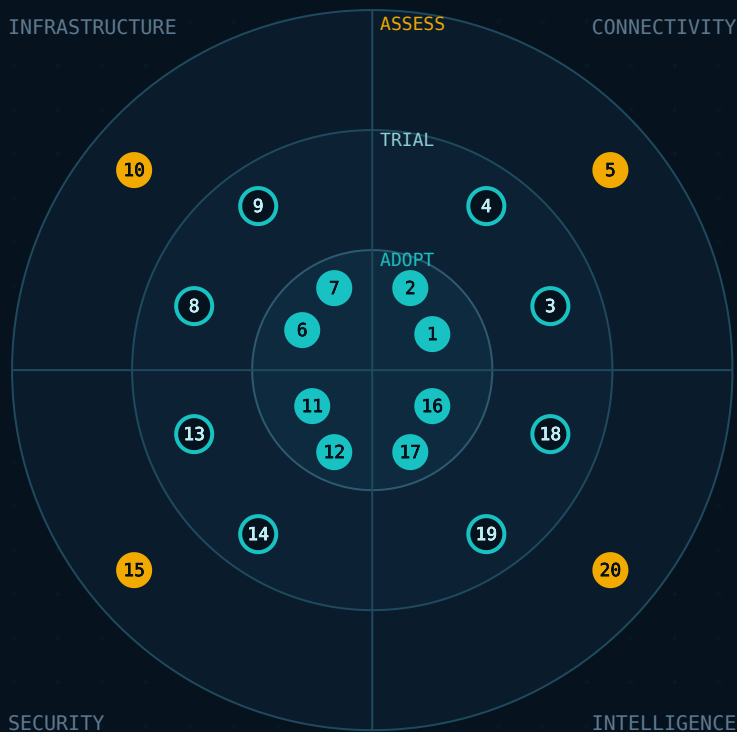
Digital QA/QC

As-built digital twin

[19] AHD TECHNOLOGY RADAR • 2026

What we deploy today, and what comes next.

Our engineering team continuously evaluates emerging technologies, so clients adopt innovation when it is proven, never before.



CONNECTIVITY

1 XGS-PON · 2 SD-WAN / SASE · 3 Wi-Fi 7 · 4 Private 5G · 5 LEO satellite backhaul

INFRASTRUCTURE

6 Edge micro-DC · 7 HCI · 8 Direct-to-chip liquid cooling · 9 GPU clusters · 10 Immersion cooling

SECURITY

11 Zero Trust · 12 XDR · 13 AI-driven SOC · 14 Passwordless / FIDO2 · 15 Post-quantum cryptography

INTELLIGENCE

16 Computer vision · 17 Predictive analytics · 18 Digital twins · 19 GenAI assistants · 20 Agentic AI operations

● ADOPT ○ TRIAL ● ASSESS

AHD INNOVATION LAB

Proof before production.

- › Proof-of-concept builds with client data and use cases
- › Interoperability testing across vendors
- › Published readiness notes on emerging standards

ADOPT

Proven and standard in our designs. Recommended by default for new projects.

TRIAL

Deployed where the business case is clear, with pilots and measured results.

ASSESS

Under active evaluation in our lab, with readiness roadmaps for clients.

[20] AHD DELIVERY FRAMEWORK

Six phases. Six quality gates.

Each phase closes with defined deliverables and a client sign-off gate, so quality is proven step by step.

PHASE	STAGE	KEY ACTIVITIES	GATE DELIVERABLES
PH-01	Assess	Site survey, laser scanning, requirements, risk register	Survey report · RTM
PH-02	Design & Submittals	BIM coordination, shop drawings, RF and capacity models	IFC drawings · MAS
PH-03	Procure	Authorised sourcing, local content, logistics to site sequence	PO log · warranties
PH-04	Build & Integrate	Certified installation crews, daily QA/QC, system integration	IRs · progress reports
PH-05	Test & Commission	FAT, SAT, performance and security testing, training	Test certs · as-builts · O&M
PH-06	Operate & Evolve	NOC / SOC operations, SLA management, upgrades	SLA reports · roadmap

DIGITAL DELIVERY

- › BIM-based clash detection with civil and MEP
- › Digital inspection and QA/QC apps on site
- › Live progress dashboards for the client
- › As-built data handed over into the digital twin

GOVERNANCE

- › Dedicated PM as single point of contact
- › PMI-aligned planning, Primavera P6 schedules
- › Formal RFI, variation and document control
- › Live risk register reviewed with the client

[21] INDUSTRIES & COMPLIANCE

Built for regulated, mission-critical sectors.

Government & Public Sector

IND-01

Sovereign hosting • NCA ECC • secure WAN

Giga-projects & Destinations

IND-02

City fiber • IOC • digital twin • 5G

Healthcare

IND-03

Clinical networks • nurse call • RTLS

Education & Research

IND-04

Campus Wi-Fi 7 • smart classrooms • HPC

Residential & Hospitality

IND-05

FTTH • IPTV • GRMS • smart home

Energy & Industry

IND-06

OT security • private LTE • SCADA comms

Transport & Aviation

IND-07

Airport ICT • PIDS • perimeter security

Banking & Retail

IND-08

SD-WAN branches • SOC • video analytics

Telecom Operators

IND-09

OSP • FTTx rollout • sites • DAS / IBS

Construction & Real Estate

IND-10

Full ELV packages • towers • compounds

Standards & regulatory framework

DESIGN • BUILD • OPERATE

INFRASTRUCTURE

ANSI/TIA-568

TIA-569

TIA-606

TIA-942

ISO/IEC 11801

BICSI

NFPA 72

EN 62676

MANAGEMENT & SECURITY

ISO 9001

ISO 14001

ISO 45001

ISO/IEC 27001

NIST CSF

IEC 62443

ITIL 4

KINGDOM OF SAUDI ARABIA

NCA ECC

NCA CCC

NCA OTCC

PDPL

CST regulations

Saudi Building Code

Local content

Quality, health & safety, environment and information security are managed in one integrated QHSE system: inspection and test plans, risk assessments, permit-to-work and secure handling of client data on every project.

[22] CUSTOMER SUPPORT & ESCALATION

Support that never sleeps.

A structured support model with clear severity levels, defined escalation paths and accountable owners at every level.

24/7 HOTLINE +966 53 009 2626	SERVICE PORTAL www.ahdtec.com	EMAIL info@ahdtec.com	ON-SITE Field engineers
---	---	---------------------------------	-----------------------------------

Incident severity matrix

LEVEL	DEFINITION	RESPONSE	RESTORE
P1	Critical: service down or security breach affecting operations	30 min	4 hrs
P2	High: major degradation, redundancy lost	60 min	8 hrs
P3	Medium: limited impact, workaround available	4 hrs	2 days
P4	Low: request, question or planned change	8 hrs	Scheduled

Escalation path



WARRANTY & SPARES

- › Manufacturer warranty managed end to end
- › Extended warranty and lifecycle options
- › Local critical-spares stock for fast replacement
- › RMA handling and advance replacement
- › Cabling system warranty with certified installers

SERVICE GOVERNANCE

- › Named service delivery manager per contract
- › Monthly SLA and incident reports
- › Quarterly service reviews and roadmap
- › Root-cause analysis for every P1 / P2 incident
- › ITIL 4 incident, problem and change processes

[23] SOLUTION BLUEPRINTS

How it comes together.

Reference designs that show how our practices combine for typical client programmes. Every blueprint is tailored during the Assess and Design phases.

BP-01 · Smart destination backbone

GIGA-PROJECTS

CHALLENGE

A new destination needs city-grade connectivity, safety and guest services from opening day.

AHD SOLUTION

OSP fiber ring, edge data centers, private 5G and Wi-Fi 7, IoT platform and an integrated operations center.

TARGET OUTCOMES

One converged network, real-time situational awareness, digital guest journeys.

XGS-PON

Private 5G

Edge DC

IOC

Digital twin

AI video analytics

BP-02 · Digital hospital

HEALTHCARE

CHALLENGE

Clinical systems, medical devices and staff communications must run without interruption and stay secure.

AHD SOLUTION

Redundant clinical network, Tier III-aligned data room, nurse call, RTLS, IoMT segmentation and SOC monitoring.

TARGET OUTCOMES

High availability, faster response to patients, protected medical data.

Spine-leaf

Wi-Fi 7

Nurse call

RTLS

NAC

SOC

BP-03 · Sovereign data center modernisation

GOVERNMENT

CHALLENGE

Ageing server rooms, rising energy cost and new data-sovereignty and AI requirements.

AHD SOLUTION

Consolidation into a modular, AI-ready facility with HCI, private cloud, immutable backup and DR.

TARGET OUTCOMES

Lower PUE, in-Kingdom data, faster service provisioning, NCA compliance.

Modular DC

Liquid cooling

HCI

Private cloud

DRaaS

NCA ECC

BP-04 · Smart university campus

EDUCATION

CHALLENGE

Thousands of users and devices, hybrid learning and a large, open campus to protect.

AHD SOLUTION

High-density Wi-Fi, smart classrooms, unified campus security and a research HPC cluster.

TARGET OUTCOMES

Seamless learning experience, safer campus, research-ready compute.

Wi-Fi 7

Smart classrooms

PSIM

GPU / HPC

SD-WAN

[24] TRUSTED BY LEADING ORGANIZATIONS

Delivering for the Kingdom's most demanding clients.

GOV

Government

Ministry of Interior Ministry of Health
Ministry of Education Ministry of Justice
Ministry of Commerce Ministry of Transport
SDAIA NIC ZATCA GOSI

FIN

Financial services

SAMA Al Rajhi Bank Riyad Bank
Alinma Bank Arab National Bank
Bank AlBilad Saudi Tadawul Tawuniya
Saudi EXIM Bank American Express

ENR

Energy & industry

Saudi Aramco SABIC Maaden
Petro Rabigh SASREF National Water Co.
Royal Commission for Jubail

TEL

Telecom, mobility & giga-projects

stc Mobily Zain Riyadh Airports
GACA NEOM Qiddiya
King Saud Medical City Imam University

36

CLIENTS SERVED

36

PROJECTS DELIVERED

4

CLIENT SEGMENTS

2023

ESTABLISHED

WHAT CLIENTS RELY ON US FOR
**Mission-critical, regulated,
always-on.**

- › Secure networks and data centers for regulated entities
- › Cybersecurity programmes aligned with NCA controls
- › Managed services and maintenance under strict SLAs
- › Complex, multi-site delivery at national scale

[25] TECHNOLOGIES WE WORK WITH • IT STACK

100+ technology partners. One integrated stack.

Leading manufacturers across every layer, with certified engineering, direct OEM support and vendor-neutral advice.

Networking & app delivery

STACK/01

Cisco

Huawei

Juniper

HPE Aruba

F5

A10 Networks

Riverbed

NetScout

Broadcom

Compute, storage & backup

STACK/02

Dell Technologies

Hewlett Packard Enterprise

Lenovo

Supermicro

Pure Storage

NetApp

Nutanix

Veeam

Veritas

Commvault

Rubrik

ExaGrid

Cyber security

STACK/03

Fortinet

Palo Alto Networks

CrowdStrike

Trend Micro

Kaspersky

Symantec

Trellix

Forcepoint

Forescout

Tenable

Qualys

Thales

BeyondTrust

Splunk

LogRhythm

LinkShadow

OPSWAT

Cloud, virtualisation & IT ops

STACK/04

Microsoft

Google Cloud

VMware

Red Hat

Citrix

ManageEngine

SolarWinds

Ivanti

Nexthink

Data & applications

STACK/05

IBM

Oracle

Cloudera

SAS

Esri

UiPath

OpenText

Software AG

GitLab

Temenos

◆ CERTIFIED TEAMS

Engineers certified on the platforms we deploy.

◆ DIRECT OEM ACCESS

Escalation to manufacturer technical centers.

◆ GENUINE SUPPLY

Authorised channels and full warranties.

[26] TECHNOLOGIES WE WORK WITH • INFRASTRUCTURE, ELV & AV

From the cable in the wall to the camera on the pole.

Passive infrastructure & data center facilities

STACK/06

Corning

CommScope

Panduit

Leviton

Schneider Electric

Eaton

Rittal

Canovate

Sunbird DCIM

TTK leak detection

Altron

Security, surveillance & access (ELV)

STACK/07

Milestone

Axis Communications

Bosch

Hikvision

Hanwha Vision

Dahua

Honeywell

LenelS2

Rasiliient

SenseTime

LenSec

Gatekeeper Security

CAME

Motorola Solutions

Building, hospitality, AV & collaboration

STACK/08

Siemens

Interel

VingCard · ASSAABLOY

Sapling

TriplePlay

Crestron

Extron

LG

Samsung

Avaya

Zoom

100+

TECHNOLOGY PARTNERS

8

TECHNOLOGY STACKS

IT + ELV

ONE INTEGRATOR

OEM

DIRECT SUPPORT

TRAINING & CERTIFICATION PARTNER

**NTI · National
Telecommunication Institute**

- › Technical training programmes for engineers and technicians
- › Certification pathways aligned with our technology stacks
- › Continuous upskilling through AHD Academy

[27] PEOPLE & CERTIFICATIONS

Certified talent is our real infrastructure.

40 TOTAL WORKFORCE	10 ENGINEERS	20 TECHNICIANS & SUPERVISORS	10 SAUDI NATIONALS • 25%	65 CERTIFICATIONS HELD
------------------------------	------------------------	---	---------------------------------------	-------------------------------------

■ ENGINEERS 25% ■ TECHNICIANS & SUPERVISORS 50% ■ SAUDI NATIONALS 25% **AVG 1.6 CERTS / EMPLOYEE**

Certification matrix · by domain and staff group

DOMAIN	CERTIFICATIONS	ENG	TECH	KSA	TOTAL
Cabling & ICT design	BICSI Installer / Technician · Panduit · Corning · CommScope	2	8	1	11
Networking	CCIE ×2 · Huawei HCIE ×2 · CCNP · HCIP · Fortinet NSE	6	1	1	8
Wireless & RF	CWNA · Aruba / Huawei wireless · RF survey	1	1	—	2
Data centers	CDCP · CDCS · Schneider DC associate	2	1	—	3
Cybersecurity	CISSP ×2 · Security+ · CEH	3	—	1	4
Cloud & virtualisation	Azure / AWS associate · VMware VCP	2	—	—	2
AI & data	Azure AI / data engineering	1	—	—	1
ELV, fire & BMS	Honeywell Fire Alarm ×3 · Honeywell VARIODYN ONE ×2 · Altron BMS ×3 · KNX Partner ×3	4	6	1	11
Project & service	PMP · ITIL 4 · Saudi Council of Engineers	5	—	2	7
Health & safety	OSHA · first aid · working at height · fire safety	2	11	3	16
Total	10 engineers · 20 technicians & supervisors · 10 Saudi staff	28	28	9	65

AHD ACADEMY

Building the next generation of Saudi ICT engineers.

- › Graduate programme for Saudi engineers and technicians
- › Annual certification roadmap per employee
- › Hands-on labs for networking, security and DC skills
- › Partnership with national training programmes
- › Mentoring by senior architects on live projects

[28] FACILITIES, TOOLS & TEST EQUIPMENT

Equipped to build, test and prove.

FAC-01

Head office

Management, engineering and design teams.

Riyadh

FAC-02

Regional offices

Project and support teams close to clients.

Egypt · Bahrain · Oman · UK

FAC-03

Warehouse & logistics

Controlled storage, kitting and critical spares.

Al Mashael, Riyadh

FAC-04

Staging & integration lab

Pre-configuration and FAT before site delivery.

Riyadh

FAC-05

Experience center

Live demos of smart building, AI and security.

Riyadh

FAC-06

NOC / SOC

24/7 monitoring and security operations.

Riyadh

Test & measurement equipment

CATEGORY	EQUIPMENT	QTY
Copper	Cable certification analysers (Cat6A / Class EA)	2
Fiber	OTDRs, fusion splicers, OLTS power meters, inspection scopes	4
Wireless / RF	Wi-Fi survey kits, spectrum analysers, PIM and DAS testers	2
Network	Traffic generators and performance testers (RFC 2544 / Y.1564)	2
Power & thermal	Power-quality analysers, load banks, thermal imaging cameras	2
Survey & BIM	3D laser scanners, BIM workstations, drones for OSP surveys	2
Security testing	Penetration-testing toolkits and vulnerability scanners	1
Total	Calibrated test & measurement instruments	15

All test equipment is maintained under a calibration programme; certificates are available on request.

[29] WHY AHD • ORGANIZATION • TRACK RECORD

The partner behind the platform.

01

Single accountability

One team from design to operations.

02

Full-stack depth

From fiber and power to AI platforms.

03

Construction DNA

Site-ready, BIM-coordinated delivery.

04

Zero-trust by default

Aligned with NCA controls from day one.

05

Vendor-neutral

Best fit for the project, not the margin.

06

Saudi talent

Local engineers and local content.

ORGANIZATION STRUCTURE

Chief Executive Officer

Business Dev. & Pre-Sales

Tenders · accounts · partners

Solutions Architecture

Design · BIM · RF

Projects & Delivery

PMO · site teams · QA/QC

Cyber & SOC

Consulting · ops · GRC

AI & Digital

Data · AI · software

Managed Services

NOC · service desk · O&M

QHSE

PROCUREMENT

FINANCE

HR & ACADEMY

LEGAL & CONTRACTS

Our track record

AT A GLANCE

KPI-01

2023

Established

KPI-02

36

Projects delivered

KPI-03

36

Clients served

KPI-04

100+

Technology partners

KPI-05

65

Certifications

[30] GOVERNANCE · ESG · LOCAL CONTENT

Responsible by design.

Strong governance, ethical conduct and sustainable engineering are part of how we work, not a separate programme.

Corporate policies

POL-01

QHSE policy

POL-02

Information security (ISMS)

POL-03

Data privacy (PDPL)

POL-04

Code of conduct

POL-05

Anti-bribery & corruption

POL-06

Conflict of interest

POL-07

Supplier code of conduct

POL-08

Whistleblowing

GOVERNANCE STRUCTURE

- › Board of directors and owners' representation
- › Executive management committee
- › QHSE & information-security steering committee
- › Risk register reviewed at management level
- › Internal audit and annual external audits

GREEN ICT

- › Energy-efficient, PUE-optimised data center designs
- › Smart energy management in buildings we integrate
- › Certified e-waste recycling and equipment recovery
- › Reduced packaging and consolidated deliveries
- › Remote operations to cut site travel

LOCAL CONTENT & SAUDIZATION

- › Local content commitments in line with LCGPA requirements
- › Preference for locally manufactured and assembled products
- › Saudi graduate hiring and development through AHD Academy

COMMUNITY

- › Internships and co-op programmes with universities
- › STEM and cybersecurity awareness sessions in schools
- › Volunteering and digital-inclusion initiatives
- › Knowledge sharing at industry events

DESIGN
ARCHITECTURE · BIMBUILD
INSTALL · INTEGRATEOPERATE
NOC · SOC · SLAEVOLVE
AI · AUTOMATION

READY WHEN YOU ARE

Let's engineer what's next.

Our solutions architects respond with a clear scope, a reference architecture and a delivery timeline.

HEADQUARTERS
Riyadh, KSAPHONE
+966 53 000 0000EMAIL
info@ahd-tech.comWEB
www.ahd-tech.com**AI**
GPU · LLM · VISION**5G**
PRIVATE · Wi-Fi 7**CLOUD**
HYBRID · PRIVATE**ZERO TRUST**
SASE · SOC 24/7**IoT / OT**
DIGITAL TWIN**EDGE DC**
TIER III · LIQUID