

# ARH S1

PORTABLE TRAFFIC ENFORCEMENT SYSTEM  
WITH ONBOARD ANPR/LPR AND COMMUNICATION

ANPR RESULTS:

**DV-LV-05**

**DV-LV-05** EU-NETHERLANDS

- NUMBER PLATE: DV-LV-05
- NATIONALITY: EU-NETHERLANDS
- SPEED: 34 MPH / 55 KMH
- RECOGNITION TIME: 2017-04-12T13:19:00:00
- BLACKLIST: -- NO --



## FLEXIBLE DEPLOYMENT, UNMATCHED PERFORMANCE

**ARH S1** is the ideal traffic enforcement and monitoring system where placing permanent installations is otherwise not feasible. The device's unique ability to autonomously execute license plate recognition, vehicle speed detection, data processing and communication makes S1 unparalleled in its class. The system's one dozen preinstalled analytical and enforcement modules, portable power source and 600 m / 1970 ft daytime, 150 m / 490 ft nighttime performance permits S1 to take the place of several complex devices for traffic management and ITS.



TOLL  
COLLECTION



BUS LANE  
AND RED LIGHT  
ENFORCEMENT



TRAFFIC  
MONITORING



LAW  
ENFORCEMENT



TRAFFIC  
SECURITY



VIDEO  
ANALYTICS

## MAIN BENEFITS

- Complete portability, autonomous operation and communication
- Quick and easy setup through the device's touchscreen
- 600 m / 1970 ft daytime, 150 m / 490 ft nighttime detection
- Onboard ANPR/LPR and data processing
- Preinstalled modules for enforcement and analytics tasks
- Certified speed detection
- Optimized for mobile traffic enforcement

TOWARD THE FUTURE IN SAFETY – SINCE 1991

## SPECIFICATIONS

**ARH S1**

ARH S1 combines ANPR/LPR engine, 30× optical zoom camera, IR illumination, communication, GPS, data processing and certified laser speed detection capabilities in a single portable unit. Its built-in motion detection, JPEG image/MJPEG stream output, internal image buffer and H.264 compression can provide up to ten times smaller video stream, which leads to less network traffic and smaller storage space.

### IMAGING

Image capture	Dual sensor solution
Sensors	1280 × 720 @ 30 frames/sec CCD 2048 × 1536 @ 20 frames/sec CMOS (Internal image processing)
Lens	30× optical zoom Motorized iris, focus and zoom Integrated IR filter changer Auto brightness control
Output image format*	JPEG with configurable labeling function
Output format	JPEG, MJPEG stream, H.264
Output video format*	H.264
ANPR range**	Daytime up to 150 m / 490 ft (with CCD sensor) Nighttime up to 100 m / 328 ft (environment-dependent)
*Another picture/video format possible **Depending on plate type (reflective/non reflective), character type, environmental conditions, target speed	

### LASER

Measurable distance interval	up to 1200 m / 3937 ft @ reflective target
Measurable speed interval	10 – 300 km/h / 6 – 186 mph (for target distance between 25 – 600 m / 82 – 1968 ft)
Accuracy	+/- 2 km/h / 1.2 mph (+/- 2 cm / 0.8 in)
Wavelength	905 nm
Eye safety class	Class 1 / Class 1m (EN60825-1)
Laser beam divergence	3 mrad
Acquisition time	0,2 s

### ILLUMINATION

Type	Integrated LED multi wavelength illuminator
IR Wavelength	760 nm / 850 nm
Power of IR illuminator	70 W / 220 W (impulse mode 400 μs pulse width)
Maximum range	~50 m / ~100 m (~164 ft / ~328 ft) (depending on reflective target)

### PROCESSING

CPU	ARM Dual Core 2 × 766 Mhz + Intel Atom Quad Core E3845 @ 1.9 Ghz
Operating memory	1.5 GB + 4 GB (DDR3)
Storage	32 GB system + 128 GB SSD user space

### I/O AND COMMUNICATION

GSM	4 G
WiFi	Included
GPS	Internal + External
Ethernet (1Gb)	1
USB	1
1× service port (useable for certification)	Optional
SMA (reserved for optional external 3G antenna)	1

### PHYSICAL CHARACTERISTICS

Dimensions (L × W × H)	361 mm × 371 mm × 224 mm (14.2" × 14.6" × 8.8")
Operating temperature	-20 °C to 50 °C (-4 °F to 122 °F)
Starting temperature minimum	-10 °C (14 °F)
IP rating	IP 54
Weight (device)	10.2 kg (22.5 lb)
Housing Material	Plastic-metal hybrid construction
Housing Color	Black
Shield Color	Blue
Mounting (device)	Standard tripod mounting

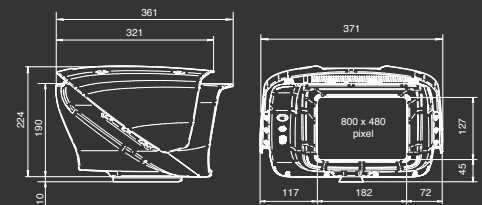


### OPTIONAL ACCESSORIES

Optional accessories are military grade carrying case with optional wheels; two-stage, extremely rigid and stable tripod with leg locks function; high capacity external battery; battery charger with built-in quick charge function, in-car mounting kit; power cord with car connector; external battery power cord and stylus.



Valid speed detection at 600 m / 1968 ft, ANPR/LPR up to 150 m / 490 ft (nighttime up to 100 m / 328 ft).



### ELECTRICAL DATA

Power supply	12 – 17 V DC
Consumption	Typ: 25 W / max. 60 W
Internal battery capacity	36 Wh
External battery capacity	260 – 520 Wh (optional) (Typ. operating time 6 – 12 hours)



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