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GPS LTE ROUTERS FOR ADAPTIVE RECOGNITION ANPR CAMERAS

Configuration Guide

GPS LTE routers

This guide helps to configure GPS LTE routers with AR ANPR cameras in order to pair geographic location information to ANPR events.



Router configuration guide

for providing GPS data on smart ANPR cameras

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2022. 02. 02.

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<u>Disclaimer</u>

This document contains instructions for integrators and technicians familiar with Adaptive Recognion cameras and advanced property configuration. Do NOT share with clients or end users! Note, that cellular network information (e.g. PIN/PUK code) necessary for configuring LTE routers may vary by region & country.

1. INTRODUCTION

This guide presents the steps to configure GPS LTE routers with Adaptive recognition ANPR cameras in order to pair geographic location information to ANPR events. The guide is only applicable for smart ANPR cameras (VIDAR US or previous models featuring firmware version series 3.6.x).

Compatible cameras:

- MicroCAM M402 fw: V3.6r1.3877
- SmartCAM / SpeedCAM fw: V3.6r1.3877
- VIDAR (US version) fw: V2021.10.14-1810
- Compatible routers:
- Robustel (R1520)

fw: r1520-firmware-beta210831

- Milesight (UR35) fw: 35.3.0.2

2. INSTRUCTIONS FOR ROBUSTEL ROUTER

Please follow the manufacturer's manual for installation and commissioning of the network device. By default, the router is available on the **IP 192.168.0.1** with the following login credentials:

user: admin password: admin

It is recommended that upon the first login, you replace the default password.

2.1. CONFIGURING NETWORK DEVICE

- Insert the SIM card into the network device
- Reboot the router
- Login and go to menu entry: Interface → Link Manager

10 robust	el					Save & Apply Reb	oot Logout
		🛆 It is str	ongly recommen	ded to change the	e default password.		×
	Link Man	ager	Status				
Status	^ Genera	al Setting	5				
Interface				Primary Link	WWAN1	v 🤋	
Link Manager				Backup Link	WWAN2	v	
LAN				Backup Mode	Cold Backup	v 😨	
Ethernet				Revert Interval	0	0	
WiFi			Emv	raancy Rehoot			
USB			Ellie	ergency Reboot	OFF		
DIDO	^ Link S	ettings					
AI Sorial Part	Index	Туре	Description	Connection Ty	/pe		54
Jenar Port	2	WWAN1 WWAN2		DHCP			
Network	L						
VPN							
Services							
Edge2Cloud							
System							

• Within the Link Settings section, click the edit button (WWAN 1 or WWAN 2, depending on which SIM slot you've had the SIM card inserted)

Index	Туре	Description	Connection Type	
1	WWAN1		DHCP	
2	WWAN2		DHCP	

• Fill in the data according to the information of your Internet Service Provider, then save your settings

Link Manager	
∧ General Settings	
Index	1
Туре	WWAN1 V
Description	
> WWAN Settings	
Automatic APN Selection	ON ON
Dialup Number	*99***1#
Authentication Type	Auto
PPP Preferred	OFF 3
Switch SIM By Data Allowance	OFF
Data Allowance	0 7
Billing Day	1 🦻

- Reboot the router
- Login and go to menu entry: Interface → Status and check the connection status of the configured WWAN link.

Brobust	Save & Apply Reboot Logou	
	▲ It is strongly recommended to change the default password.	×
	Link Manager Status	
Status	^ Link Status	
Interface	Index Link Status Uptime IP Address	1
Link Manager	1 WWAN1 Connected 0 days, 00:08:16 100.71.154.195/255.255.255.248	
LAN	2 WWAN2 Disconnected	
Ethernet	WWAN Data Usage Statistics	
Cellular	WWAN1 Monthly Stats Clear	
USB	WWAN2 Monthly Stats Clear	
DIDO		
AI	WAN Data Usage Statistics	4
Serial Port	WAN Monthly Stats Clear	
Network		
VPN		
Services		
Edge2Cloud		
System		

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In case the status is Connected, proceed to chapter 2.2, otherwise (if the status • remains Disconnected) navigate to the menu entry: Interface \rightarrow Cellular and fill in additional information of the SIM card by editing Advanced Cellular Settings.

Status Interface Unk Manager Link Manager		Cellu	lar	Status	AT Debug		
Interface Index SIM Card Phone Number Network Type Band Select Type 1 SIM1 Auto All Image: Similar Si	Status	^ Advan	iced Cellu	lar Settings			
Ink Manager 1 SIM1 Auto All Imager Imager 2 SIM2 Auto All Imager Imager Imager Auto All Imager Imager Imager Imager Imager Imager Imager Imager Imager <	Interface	Index	SIM Card	Phone Number	Network Type	Band Select Type	
LAN 2 SIM2 Auto All Ethernet Celludar General Settings	Link Manager	1	SIM1		Auto	All	Z
Ethernet Cellular W USB UDDO A Serial Port Network VPN Services Edge2Cloud System Suldar Suldar Suldar Suldar Suldar Cellular Network Settings Network Type All V O Cellular Network Settings	LAN	2	SIM2		Auto	All	I
Cellular Network Settings Network Type Auto I IIII IIIIIIIIIIIIIIIIIIIIIIIIIIIII	Ethernet						
Wifi USB DODO At Services Edge2Cloud System	Cellular						
USB DUDO AT Serial Port Network VPN Services Edge2Cloud System ellular General Settings Index 1 SIM Card SIM1 ♥ Phone Number PIN Code ? PIN Code ? Extra AT Cmd ? Telnet Port 0 ? Cellular Network Settings Network Type Auto ♥ ? Band Select Type All ♥ ? Advanced Settings	WiFi						
bibo at serial Port Network VPN Services Edge2Cloud System ellular General Settings Index 1 SIM Card SIM1 ♥ Phone Number Phone Number PIN Code ⑦ Extra AT Cmd ⑦ Phone Number PIN Code ⑦ Extra AT Cmd ⑦ Cellular Network Settings Cellular Network Settings Network Type Auto ♥ ⑦ Band Select Type All ♥ ⑦ Advanced Settings	USB						
A Serial Part Network VPN Services Edge2Cloud System Selular Selular Sim Card Sim 1 Phone Number Pin Code Pin Code Pin Code Extra AT Cmd Telnet Port Pin Code Extra AT Cmd Telnet Port Pin Code Pin Code	DIDO						
Network VPN Services Edge2Cloud System Selular General Settings Index 1 SIM Card SIM1 V Phone Number PIN Code ? Extra AT Cmd ? Ext	AL Corial Part						
Network VPN Services Edge2Cloud System Subar	Senar Port						
VPN Services Edge2Cloud System Sulular General Settings Index 1 SIM Card SIM1 ♥ Phone Number Phone Number Phone Number PIN Code ② Extra AT Cmd ③ Extra AT Cmd ③ Cellular Network Settings Network Type Auto ♥ ⑦ Band Select Type All ♥ ⑦ Band Select Type All ♥ ⑦	Network						
Services Edge2Cloud System Selular General Settings Index 1 SIM Card SIM1 Phone Number Phone Number Phone Number PIN Code PIN CODE PI	VPN						
Edge2Cloud System ellular General Settings Index 1 SIM Card SIM1 Phone Number PIN Code ⑦ Extra AT Cmd ⑦ Extra AT Cmd ⑦ Telnet Port 0 ⑦ Cellular Network Settings Network Type Auto V ⑦ Band Select Type All V ⑦	Services						
System System Syst	Edge2Cloud						
ellular General Settings Index 1 SIM Card SIM1 Phone Number PIN Code ? Extra AT Cmd ? Telnet Port 0? Cellular Network Settings Network Type Auto ? Band Select Type All ? ? Advanced Settings	System						
Index 1 SIM Card SIM1 V Phone Number PIN Code ? Extra AT Cmd ? Extra AT Cmd ? Telnet Port 0 ? Cellular Network Settings Network Type Auto V ? Band Select Type All V ? Advanced Settings	General Setting	s					
SIM Card SIM1 V Phone Number PIN Code ? Extra AT Cmd ? Telnet Port 0 ? Cellular Network Settings Network Type Auto V ? Band Select Type All V ? Advanced Settings				Index	1		
Phone Number PIN Code Extra AT Cmd Telnet Port Cellular Network Settings Network Type Auto Band Select Type All Cellular Settings				SIM Card	SIM1	V	
PIN Code Extra AT Cmd Telnet Port Cellular Network Settings Network Type Auto Band Select Type All Cellular Settings			Pł	none Number			
Extra AT Cmd ⑦ Telnet Port ⑦ Cellular Network Settings ⑦ Network Type Auto ⑦ Band Select Type All ⑦ Advanced Settings Ø Ø				PIN Code			
Cellular Network Settings Network Type Auto V ? Band Select Type All V ? Advanced Settings				Tattes AT Cord			
Cellular Network Settings Network Type Auto V ? Band Select Type All V ? Advanced Settings ? ?			E	Extra AT CMG			
Cellular Network Settings Network Type Auto V ? Band Select Type All V ? Advanced Settings				Telnet Port	0	3	
Network Type Auto V ? Band Select Type All V ? Advanced Settings	Cellular Networ	k Setti	ngs				
Band Select Type All V ?			N	letwork Type	Auto	v 😨	
Advanced Settings			Band	d Select Type	All	v 😨	
	Advanced S <u>etti</u> r	ngs					

Check the connection at the Interface → Cellular menu Status section •

Orobust	el				Save & Apply Reboot	Logout
	۵	It is strongly recom	nmended to change t	he default password.		×
	Cellular	Statu	IS AT	Debug		
Status	^ Status					
Interface	Index	Modem Status	Modem Model	IMSI	Registration	
Link Manager	1	Ready	EG25	216703124658170	Registered to home network	
LAN						
Ethernet						
Cellular						
USB						
DIDO						
AI						
Serial Port						
Network						
VPN						
Services						
Edge2Cloud						
System						

2.2. CONFIGURING GPS

- Attach the GPS antenna(s) then turn ON the device •
- Login and go to menu entry: Services \rightarrow GPS •
- Enable GPS under the General Settings section •

GPS	Status	Мар	
General Settin	igs		
		Enable GPS ON	OFF
	Syne	c GPS Time ON	OFF

- Reboot the device •
- Login and go to menu entry: Services \rightarrow GPS and check reported coordinates in • **STATUS** section

∧ GPS Status	
Status	Standalone Fixed
UTC Time	2022-01-28 08:41:27
Last Fixed Time	2022-01-28 08:40:41 UTC
Satellites In Use	4
Satellites In View	GPS(14), Galileo(0), BeiDou(0), GLONASS(0)
Latitude	47.493221
Longitude	19.022751
Altitude	106.90 m
Speed	0.00 m/s

Confirm that RS232 Report Settings are enabled •

∧ RS232 Report Settings	
Report to RS232	ON OFF
Report GGA Sentence	ON OFF
Report VTG Sentence	ON OFF
Report RMC Sentence	ON OFF
Report GSV Sentence	ON OFF



2.3. CONFIGURING ANPR CAMERA

 Access the camera's Plain config interface via web GUI, using 'IPaddress'/#plainconfig

O 🔒 192.168.6.87/ polyinconfic						
						_
					ADAPTIVE RECOGNITION	8
	MICROCAM (M402) > SPEC	IAL > PLAIN CONFIG			V3.6r1.38	m
	BASIC SETUP	PLAIN CONEIG - CAMERA			7	
	ADVANCED SETUP			-		1
	ANPR	⊞ logging ⊞ maintenance		te lpr		
	MAINTENANCE	🖽 file		⊞ trigger		
	иа в	⊞ stat		E upload		
	HELP.	🗄 hwlayer		🖅 carnapi		
		(±) capture				
		PLAIN CONFIG - ANPR			?	
		E gsProperty				-
			Software Version: V3.6r1.3877	Copyright © 1993-2021 Adaptiv	e Recognition Hungary. All rights reserve	rd.

Set the following property values, by following the tree-structure configuration panel by inserting the new value, then clicking on Set and rebooting the device after each property change:

- gxProperty/default/cff/capture/gps/enabled: 0 => 1
- gxProperty/system/gps/type: 0 => 5
- gxProperty/system/gps/device: tcp://'IP-address:PORT'

(i.e.: tcp://192.168.1.1:8004)

MICROCAM (M402) > SPEC	IAL > PLAIN CONFIG	V3.6r1.3877
BASIC SETUP	PLAIN CONFIG - CAMERA	2
ADVANCED SETUP		
ANPR	El logging El lpr El maintenance El control	
	🗄 file 🕀 trigger	
MANNIENDANGE	⊞ setup ⊞ config	
HELP	🗄 stat 🗄 upload	
	🗄 hwlayer 🗄 camapi	
	⊞ capture	
	PLAIN CONFIG - ANPR	?
	omanpr manpr-7.3.12.239:eur Set	^
	⊞ evts	
	Edf	
	T structure	
	t filter	
	🗄 manual_trame	
	🖽 dasses	
	⊞ image_strip	
	🖃 gps	
	enabled 0 Set	
	I proc	~
	Software Version: V3.61.3877 Copyright © 1993-2021 Adaptive Recognition Hungary.	All rights reserved.

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• In case of multiple ANPR cameras connected to the router, a different PORT must be defined for each camera, as the router handles a single device on every PORT (8004 in this example):

PASIC SETUP AVVACED SETUP AIPR MINTENNACE B logging B logeing B logeing <t< th=""><th>MICROCAM (M402) > SPECI</th><th>AL > PLAIN CONFIG</th><th></th><th></th><th>V3.6r1.3877</th></t<>	MICROCAM (M402) > SPECI	AL > PLAIN CONFIG			V3.6r1.3877
ADVANCED SETUP NIPR Bigging B	BASIC SETUP	PLAIN CONFIG - CAMERA			2
NIRE Magning Display bit MAINTENANCE El maintenance El control HELP El setup El setup HELP El setup El setup <th>ADVANCED SETUP</th> <th></th> <th></th> <th>The last</th> <th></th>	ADVANCED SETUP			The last	
MINTENANCE	ANPR	⊞ logging ⊞ maintenance		⊡ control	
HELP B stat B upload B hwlayer B stat B upload B hwlayer B camapi B capture PLAIN CONFIG - ANPR PLAIN CONFIG - ANPR PLAIN CONFIG - ANPR PLAIN CONFIG - ANPR PLAIN CONFIG - ANPR PLAIN CONFIG - ANPR PLAIN CONFIG - ANPR PLAIN CONFIG - ANPR PLAIN CONFIG - ANPR P	MAINTENANCE	⊞ file ⊞ setun		⊞ trigger	
El hwlayer El camapi El c	HELP	⊞ stat		⊞ upload	
PLAIN CONFIG - ANPR ? System System B network Trp Sgs Trp Sgs dwice trp://192168.11:8004 Set Set Imodem Uighttpd version 21.515 Set Common Z		⊞ hwlayer ⊞ capture		🗄 camapi	
PLAIN CONFIG - ANPR ? System System B network Trp Sps type gps type Set device trp.//19216811:8004 Set device device trp.//19216811:8004 Set device device trp.//19216811:8004 Set device device trp.//19216811:8004 Set device device device trp.//19216811:8004 Set device devic					
PLAIN CONFIG - ANPR ? System System B network Trp Sps type gps type Set Wrice trp://192168.11:8004 Set Set Wrice trp://192158.11:8004 Set Set Wrisin 21.515 Set Set B common Set					
PLAIN CONFIG - ANPR 2 System System B network Trp Sgs Trp Sgs dwice trp://192168.11:8004 Set Set Imodem Elighttpd version 21.515 Set Common Set					
PLAIN CONFIG - ANPR 2 System the network Trp gps type 5 Set device tep//192168.11:8004 Set device tep/fischer device device tep/fischer device tep/fischer device device device device tep/fischer device					
PLAIN CONFIG - ANPR 2 System the network Trp gps type 5 Set device tep//192168.11:8004 Set device tep/fischer device device tep/fischer device tep/fischer device device device device tep/fischer device					
PLAIN CONFIG - ANPR ? System System B network Trp gps type device tp//192168.11:8004 modem fightpd version 21.515 common 21.515					_
System etwork trp gps type 5 Set device trp//192.168.1.1:8004 Set tighttpd version 21.515 Set device tep//192.168.1.1:8004 Set		PLAIN CONFIG - ANPR			?
		😑 system			^
Intp gps type 5 Set device tcp://192.168.1.1:80.04 Set If modem If dem Version 2.1.515 Set If common If demines		πetwork			
□ gps type 5 device trp://192.168.1.1:8004 Set If modem If lightpd version 21.515 Set		🖽 ntp			
type 5 Set device tcp://192.168.1.1:8004 Set		🖃 gps			
device tcp://192.168.11:8004 Set		type	5	Set	
E modern B lightpd version Z1.515 Set Common dfensines		device	tcp://192.168.1.1:8004	Set	
B lightpd version 21.515 Set D common B defensions		🗄 modern			
version 21.515 Set		🛨 lighttpd			
		version	2.1.515	Set	
± cfengines		🗄 common			
⊞ mmr-gen		⊞ mmr-gen			~
Hi Amhuaz		I+L cm biwaiz			•

• Login to the router GUI and go to menu entry: Services → GPS and add (+) the PORTS that are defined for the camera(s)

^ GPS	∧ GPS Servers									
Index	Enable	Protocol	Local Address	Local Port	Server Address	Server Port	+			
1	true	TCP Server	192.168.1.1	8001	192.168.1.1	8001	ZX			
2	true	TCP Server	192.168.1.1	8002	192.168.1.1	8002	ZX			
3	true	TCP Server	192.168.1.1	8003	192.168.1.1	8003	ĽΧ			
4	true	TCP Server	192.168.1.1	8004	192.168.1.1	8004	ĽΧ			

GPS	
∧ Server Settings	
Index	4
Enable	ON OFF
Protocol	TCP Server v
Local Address	192.168.1.1
Local Port	8004
Send GGA Sentence	ON OFF
Send VTG Sentence	ON OFF
Send RMC Sentence	ON OFF
Send GSV Sentence	ON OFF
	Submit Close

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The GPS information is now present in the event XML-s without the need for further • intervention. In case the coordinates shall be highlighted on the image caption labels, login to the camera interface and navigate to menu entry: $ANPR \rightarrow Title Editor$ and add the following tags in the Line editor section: GPS: \$A, \$O

🔿 🙆 192.168.6.87/#anpr_title						
IIILE EDITOR	TITLE EDITOR			SAVE ?		
ENGINE MANAGER						
RESULT UPLOAD						
BLACK-, WHITELISTS				8		
DIAGNOSTICS						
MAINTENANCE		And Address of the owner of the	100000			
HELP						
	Please keep in mind, t	hat the labels under the live view on this pac	te serve demonstration pur	poses only! The actual labels will be based on		
		valid i	information.			
	CAMERA CONSTANTS					
	Device ID string:	Smart/SpeedCAM	Device location string:	Test location		
	Approaching vehicle string:	APPROACHING	Leaving vehicle string:	LEAVING		
	Unknown vehicle direction:	UNKNOWN				
	LINE EDITOR					
	Line editor:	\$y-\$o-\$d \$h:\$m:\$s LP: \$p COUNTRY: \$f	STATE: \$j GPS: \$A, \$0			
	SAMPLE LIBRARY					
	X (/ di-d-)	<i>P</i> .	No. (2 di da)			
	tear (a digits):	by	tear (2 digits):	Sr		
	Month:	50	Day:	\$d		
	Hour:	δh	Minule:	3m		
	Second:	\$:	'\$' character:	\$5		
	Device ID string:	\$E	Device location:	\$G		
	GPS latitude:	\$A	GPS longitude:	\$0		
				No.		



3. INSTRUCTIONS FOR MILESIGHT ROUTER

Please follow the manufacturer's manual for installation and commissioning of the network device and make sure it is connected via one of the LAN ports (LAN#1 to LAN4). By default, the router is available on the **IP 192.168.0.1** with the following login credentials:

```
user: admin password: password
```

It is recommended that upon the first login, you replace the default password.

3.1. CONFIGURING NETWORK DEVICE

• After inserting the SIM card, power on the device and login the to web GUI



Milesight Industrial Ro	oter × +				
← → C ▲ Ne	m biztonságos 192.168.1.1				er 🗟 🖻 🕁 🎓 🦁
🧔 Milesig	ht				💄 admin 📃 🔁
Status	Overview	Cellular Network	WLAN VPN	Routing Host List	Help Show the serial number of router.
	GPS				Firmware Version
	ayatan mermat		a system status		* Show the current firmware
	Model	UR35-L04EU-G-P-W	Local Time	2022-01-28 08:57:06 Friday	version of router.
	Serial Number	621982648970	Uptime	00:12:24	Show the current hardware
	Firmware Version	35.3.0.2	CPU Load	9%	version of router.
	Hardware Version	V2.0	RAM (Available/Capacity)	39MB/128MB(30.47%)	Local Time Show the current local time
Maintenance			Flash (Available/Capacity)	83MB/128MB(64.84%)	of system.
	Cellular Curk a	9.050	WAN		Uptime Show the information on how long the router has
	Status	Ready, FDD LTE, YII	Status	Offine	CRILland
	Current SIM	SIM2	IPi4	192.168.6.86/23	Show the current CPU
	P.4	QA AA 168 131/20	IP:6	fe60: 26e1:24#.fef2.6d4c/64	utilization of the router.
		60000.0000.00.0.0101	MAC	24 e1 24 Ø 6d 4c	RAM (Available/Capacity)
	End Connection Duration	0 days, 00:10:51	Connection Duration	0 days, 00.00 00	Show the RAM available and the capacity RAM
	Data Usage Monthly	3693.9 MiB			Flash
	WLAN] LAN		(Available/Capacity) Show the Flash available and the capacity Flash
	Status	Running	IP4	192.168.1.1/24	Current City
	Mode	AP	IP:6	fe80::4c6d:40ff.feda.cba7/64	Show the current SIM card
	SSID	Router_F26D4B	Connected Devices	1 Manual Refresh 👻	Refresh ed.
					- Data Usage Monthly

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Navigate to menu entry: Network → Interface and within the Cellular section fill in the • APN address and the access number provided by the ISP, then click SAVE

Milesight						
Status	Link Fallover Cellular	Port WA	N Bridge	WLAN 5	Switch	Loopback
	Cellular Settings					
		SIM1		SIM2		
	Protocol Type	IPv4	*	IPv4	~	
	APN			standardnet.vodafone.net		
	Usemame					
	Password					
	PIN Code					
	Access Number			*99#		
	Authentication Type	Auto	*	Auto	~	
	Network Type	Auto	*	Auto	~	
	PPP Preferred					
	SMS Center					
	Enable NAT					
	Roaming					
	Data Limit	0	MB	0	MB	
	Billing Day	Day 1 🗸 of The	e Month	Day 1 v of The Mond	h	
	Connection Setting					
	Connection Made	Always Online	×			
	Re-dial Interval(s)	5				

- Navigate to menu entry: Network \rightarrow Interface and within the Link Failover make sure • that;
 - cellular connection type is set to DHCP 0
 - cellular connection is active in [enable rule] checkbox 0
 - in case WAN connection is active (not necessarily needed when the router is 0 installed on a mobile/vehicle platform), make sure that WAN is above cellular connections in the priority list
 - click SAVE 0



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3.2. **CONFIGURING GPS**

Navigate to menu entry: Industrial \rightarrow GPS and enable the checkbox within GPS • section, then click SAVE

Milesight Industri	al Router	× +			
← → C ▲	Nem biztons	ágos 192.168.1.	1/#industrial/gps/gps		от Sį
🧿 Miles	ight				
Status		GPS	GPS IP Forwarding	GPS Serial Forwading	
	÷	Enable			
	•	Save			
	-				
	۲				

- Switch to GPS IP forwarding section, then; •
 - o activate the [enable] checkbox
 - fill in the desired port number in [Local Port] field 0
 - activate all location format [RMC, GSA, GGA, GSV] checkboxes 0
 - click SAVE 0

itatus	GPS GI	PS IP Forwarding	GPS Serial Forwading
letwork 🕨	GPS IP Forwardin	g	
	Enable		
lystem 🕨	Туре	Server	~
-	Keepalive Interval	75	s
laustrial	Keepalive Retry	9	times
vo	Local Port	8004	
Serial Port	Report Interval	1	s
	Include RMC		
Modbus Slave	Include GSA		
Modbus Master	Include GGA		
GPS	Include GSV		
	Message Prefix		
taintenance 🕨 🕨	Message Suffix		





- To test the signal, make sure that GPS anrennas are attached properly and power on • the device in a place where satellites are visible without obstruction (e.i. outdoors).
- Open a command prompt and use telnet command to check whether GPS • coordinates are recorded. Use command syntax: telnet [IP address] [GPS-Port]

B Parancssor	
Microsoft Windows [Version 10.0.19043.1348] (c) Microsoft Corporation. Minden jog fenntartva.	
C:\Users\attila.lippai>telnet 192.168.1.1 8004	

Telest	10216011
	\$GPGSV,5,2,17,82,,,,87,47,868,,88,10,859,,89,15,111,,1*5C \$GPGSV,5,3,17,1:
49,,,34,	1*61 \$GPRMC,,V,,N*53 \$GP664,,0,00
	\$GPOSA,A,1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
GPGSV,5,	3,17,14,39,161,,15,87,296,,33,,,34,39,,,34,1*69 \$GPROSV,5,4,17,41,,,34,42,,,34,48,,,34,49,,,34,1*61 \$GPROC,,V,
3,27,20,	40,230,21,30,77,054,17,1*6C \$GPGSV,5,2,17,02,,07,47,060,.08,10,059,.09,15,111,.1*5C \$GPGSV,5,3,17,14,39,161,,15,07,296,.33,,34,3
,N*53	204 9 166

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3.3. **CONFIGURING ANPR CAMERA**

Access the camera's Plain config interface via web GUI, using 'IP-• address'/#plainconfig

O 🔒 192.168.6.87/ photosome					
					ADAPTIVE RECOGNITION
	MICROCAM (M402) > SPECI	AL > PLAIN CONFIG			V3.6r1.3877
	BASIC SETUP	PLAIN CONFIG - CAMERA			7
	ADVANCED SETUP	The second secon			
	ANPR	⊞ iogging ⊞ maintenance		E control	
	MAINTENANCE	⊞ file ⊞ colum		⊞ trigger ⊞ contin	
	HELP	⊞ stat		I upload	
		twiayer carture		🐮 carnapi	
		El capitore			
		PLAIN CONFIG - ANPR			?
		E gxProperty			
			A		
			Somware version V3.6/1.3877	Copyright @ 1993-2021 Adap	tive necognition Hungary. All rights reserved.

- Set the following property values, by following the tree-structure configuration panel • by inserting the new value, then clicking on Set and rebooting the device after each property change
 - O gxProperty/default/cff/capture/gps/enabled: 0 => 1
 - gxProperty/system/gps/type: 0 => 5 0
 - o gxProperty/system/gps/device: tcp://'IP-address:PORT'

(i.e.: tcp://192.168.1.1:8004)



MICROCAM (M402) > SPECI	IAL > PLAIN CONFIG			V3.6r1.3877
BASIC SETUP		*4		2
ADVANCED SETUP	PLAIN CONFIG - CAMER	A		1
	🗄 logging		🗄 lpr	
ANPR	maintenance ■ maintenance			
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		Software Version: V3.6r1.3877	Copyright @ 1993-2021 Adaptive Recognition Hunga	ry. All rights reserved.

The GPS information is now present in the event XML-s without the need for further intervention. In case the coordinates shall be highlighted on the image caption labels, login to the camera interface and navigate to menu entry: ANPR → Title Editor and add the following tags in the Line editor section: GPS: \$A, \$O

	TITLE EDITOR			SAVE			
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