# **GPS**

configuration, or settings related to a GPS (Global Positioning System) device or module. Here's a breakdown of some of the parameters:

# • Latitude and Longitude:

Latitude: 23.049933666666668Longitude: 72.50133166666666

# • Sampling Rate:

o The device samples data every 10 seconds.

# • Port Configuration:

Port: /dev/ttyMAX1Baudrate: 9600

Data bits: 8Stop bits: 1Parity: N (None)

o Port timeout: 10 milliseconds

• Device ID:

o Unique identifier: 4a460260-b3d9-11ec-8295-a7f53e2a5472

#### • **GPS Configuration:**

o GPS read timeout: 10 seconds

o GPS HDOP (Horizontal Dilution of Precision) Threshold: 1

Number of satellites threshold: 6

# • Operation Mode:

Stationary

#### • Distance Threshold:

o 50 meters

#### Write Interval:

o Data is written or logged at intervals of seconds specified by the write interval

	Data	
Parameter	Type	Information
Latitude	Float	Latitude coordinates (decimal degrees) indicating the device's location.
Longitude	Float	Longitude coordinates (decimal degrees) indicating the device's location.
Sampling Rate	Integer	Sampling interval in seconds, determining how often the GPS data is recorded.
Port Configuration		
- Port	String	/dev/ttyMAX1
- Baudrate	Integer	9600
- Data bits	Integer	8
- Stop bits	Integer	1
- Parity	String	N (None)
- Port timeout	Integer	10 milliseconds
Device ID	String	A unique identifier for the device.

GPS Configuration		
- GPS read timeout	Integer	10 seconds
- GPS HDOP Threshold	Float	1
- No. of satellites	Integer	6
Mode	String	Operating mode of the GPS device (e.g., Stationary).
Distance Threshold	Float	Threshold distance in meters.
Write Interval	Integer	Time interval in seconds for writing or logging data.

# Digital Input:

Parameter	Data Type	Information
Pin Number	Integer	Digital input pin number.
Sampling Rate (Sec)	Integer	Sampling interval in seconds for digital inputs.
Destination	None	Selected destination for digital input data.

# **Analog Input:**

Parameter	Data Type	Information
Pin Number	Integer	Analog input pin number.
Sampling Rate (Sec)	Integer	Sampling interval in seconds for analog inputs.
Destination	None	Selected destination for analog input data.
Pin Name	String	Name associated with the analog input pin.
Device ID	String	Identifier for the device associated with the pin.
Channel Type	String	Type of analog input channel.
Engg. Scale Low	Float	Engineering scale low value for calibration.
Engg. Scale High	Float	Engineering scale high value for calibration.
Scale Low	Float	Raw scale low value for calibration.
Scale High	Float	Raw scale high value for calibration.
Value	Float	Current value read from the analog input pin.

These tables outline the key parameters, their data types, and brief explanations for both digital and analog input configurations.

# **Ethernet Configuration:**

Parameter	Options	Information
Interface	DHCP Server, Static IP	Selects the method for assigning IP
	Address	addresses.
IP Address	199.199.51.179	The static IP address assigned to the
		device.
Gateway Server	199.199.50.3	The IP address of the gateway server.
Subnet	255.255.254.0	The subnet mask for the IP address.
Primary DNS Server	8.8.8.8	The IP address of the primary DNS
		server.

Secondary DNS	8.8.4.4	The IP address of the secondary DNS
Server		server.

# **Explanation:**

#### Interface:

- o Options: DHCP Server, Static IP Address
- o *Information:* Specifies whether the device should obtain its IP address dynamically from a DHCP server or use a static IP address.

#### • IP Address:

- o Value: 199.199.51.179
- o *Information:* The static IP address assigned to the device when using a static configuration.

# • Gateway Server:

- o Value: 199.199.50.3
- o *Information:* The IP address of the gateway server, which is the entry point to another network or the internet.

#### • Subnet:

- o Value: 255.255.254.0
- o *Information:* The subnet mask, defining the network's address range and dividing the IP address into network and host portions.

# • Primary DNS Server:

- o Value: 8.8.8.8
- o *Information:* The IP address of the primary Domain Name System (DNS) server, responsible for translating domain names to IP addresses.

# • Secondary DNS Server:

- o Value: 8.8.4.4
- o *Information:* The IP address of the secondary DNS server, used as a backup if the primary DNS server is unavailable.

# **GSM/LTE Configuration:**

Parameter	Value	Information
Interface	Serial Port	Communication interface used for GSM/LTE communication.
Serial Port	/dev/ttyUSB 2	The specific serial port assigned for GSM/LTE interface.
APN name	airtelgprs.co m	Access Point Name (APN) for connecting to the mobile data network.
Modem name	4G	Name or identifier for the GSM/LTE modem.
IP Address		IP address assigned to the device when connected to the mobile data network.
Gateway		IP address of the gateway for the mobile data network.
Signal Strength		The strength of the cellular signal received by the modem.
Registration Status		Indicates whether the device is registered on the mobile network.

No SIM Card	Indicates the presence or absence of a SIM card.
Operator name	Name of the mobile network operator the device is connected to.
IMEI	International Mobile Equipment Identity - a unique identifier for the GSM/LTE modem.

#### **Explanation:**

#### Interface:

- o Value: Serial Port
- o *Information:* Specifies the communication interface used for GSM/LTE communication. In this case, it is a serial port.

#### • Serial Port:

- Value: /dev/ttyUSB2
- o *Information:* The specific serial port assigned for GSM/LTE communication.

#### APN Name:

- o *Value:* airtelgprs.com
- o *Information:* The Access Point Name (APN) is a gateway between a mobile network and the internet, allowing the device to access mobile data services.

#### • Modem Name:

- o Value: 4G
- o *Information:* Identifies the specific GSM/LTE modem being used (e.g., 4G).

#### • IP Address:

- Value: (Not provided)
- Information: The IP address assigned to the device when connected to the mobile data network.

#### • Gateway:

- Value: (Not provided)
- o *Information:* The IP address of the gateway for the mobile data network.

#### Signal Strength:

- Value: (Not provided)
- o *Information:* Represents the strength of the cellular signal received by the modem, indicating the quality of the connection.

# • Registration Status:

- Value: (Not provided)
- Information: Indicates whether the device is successfully registered on the mobile network.

#### No SIM Card:

- Value: (Not provided)
- o *Information:* Indicates the presence or absence of a SIM card in the GSM/LTE modem.

#### • Operator Name:

- Value: (Not provided)
- o *Information:* Displays the name of the mobile network operator to which the device is currently connected.

#### • IMEI:

Value: (Not provided)

o *Information:* The International Mobile Equipment Identity is a unique identifier for the GSM/LTE modem.

This table provides an overview of the GSM/LTE configuration parameters, including the values and explanations for each setting.

#### **Port Forward Rules:**

Rule No.	Input Interface	Input Port	Forward Interface	Forward IP	Forward Port	Remove
199.19951179 e	(Not provided)	(Not provided)	(Not provided)	(Not provided)	(Not provided)	Remove

# **Explanation:**

#### Rule No.:

o *Value:* 199.19951179e

o *Information:* Identifier for the port forwarding rule.

# • Input Interface:

Value: (Not provided)

o *Information:* The network interface on which the incoming traffic is received.

# • Input Port:

Value: (Not provided)

o *Information:* The port number on the input interface where incoming traffic is received.

#### • Forward Interface:

o Value: (Not provided)

o *Information:* The network interface through which the forwarded traffic will be sent.

#### Forward IP:

o *Value:* (Not provided)

o *Information:* The IP address to which the incoming traffic will be forwarded.

#### • Forward Port:

Value: (Not provided)

o *Information:* The port on the forward IP address to which the incoming traffic will be forwarded.

#### • Remove:

o Button: Remove

o *Information:* Option to remove or delete the port forwarding rule.

# **Firewall Settings:**

Rule No.	Rule Type	Protocol Type	Whitelist IP	Whitelist Port	Remove
(Not provided)	(Not provided)	(Not provided)	(Not provided)	(Not provided)	Remove

#### **Explanation:**

#### • Rule No.:

- o Value: (Not provided)
- o *Information:* Identifier for the firewall rule.

# • Rule Type:

- Value: (Not provided)
- o *Information:* Specifies the type of rule, which could include settings for allowing or blocking traffic.

# • Protocol Type:

- Value: (Not provided)
- o *Information:* Specifies the communication protocol to which the rule applies (e.g., TCP, UDP).

#### • Whitelist IP:

- o *Value:* (Not provided)
- o *Information:* The IP address to be whitelisted. Use "0.0.0.0" to whitelist all IPs.

#### • Whitelist Port:

- Value: (Not provided)
- o *Information:* The port number to be whitelisted. Use "0" to whitelist all ports.

#### • Remove:

- o Button: Remove
- Information: Option to remove or delete the firewall rule.
  Please provide more details or clarify if there's specific information missing or if the formatting is different.