Datasheet- Data Logger HTS-300C

Specifications:

Parameters	Specifications
Model No.	HTS-300C
Supply Voltage	7V-24V DC/2A (Reverse Polarity Protection: Yes)
MCU	Atmel ARM Cortex M0+ 32 bit
GSM /GPRS	Quad Band 850/900/1800/1900 MHz GPRS Mobile Station Class B
Storage	Micro SD card (SDHC)(Optional) Support up to 4 GB Card
USB Interface	Inbuilt Micro USB 2.0 (Used for Device Configuration)
RS-485 Interface	Support Standard Modbus protocol to read parameters of Inverter
LED indication	Data transmission status Connectivity
Ambient Temperature	0° C to 60° C
Data Protocol	Support HTTP/HTTPS
Basic SMS Configuration	Yes Supported







Data Format: Json

```
{
 "device_type": "3acf237d",
 "device_name": "3acf237d1",
 "device id": "66b34859a1",
 "date": "22/02/2022",
 "time": "22:39:39",
 "time_zone": "Europe/London",
 "latitude": "0",
 "longitude": "0",
 "software_ver": "B6.60",
 "signal_strength": "2",
 "valid": true,
 "data": {
  "1": 512,
  "2": 0,
  "3": 0,
  "4": 0,
  "5": 512,
  "6": 0,
  "slave_id": "1"
}
ļ
```

Device Configuration

RMU required configuration while using for the first time. It will be configured through PC/OVER THE AIR.

1) Slave Generator Screen: In this screen you can configure Slave device (which is support standard Modbus protocol) like On grid inverter, Weather Unit etc. You have the flexible setting option for Modbus parameters like Modbus address, datatype, Function code, Multiplier factor.

slave	Generator Device	e Generator Connectio	D n Configure Tin	EVICE CONFIG	URATOR V1.0 PN						- (3)
De	eviceID : 201902	20002 SlavelD :	1 ~	DeviceType :	pump	DeviceNa	me : gd100_1		Mode :	RTU	×
	EN	ParameterNar	ne Parar	neterAddress	Paramete	rDataType	ParameterValueTyp	e	Parame	terMultiplier	^
		control command	4096		uint16_ba	~	HoldingRegister	~	1		
-		invt status	4097		uint16_ba	~	HoldingRegister	~	1		
	Z	output freq	12288		uint16_ba	~	HoldingRegister	~	0.01		
		Ref. freq	12289		uint16_ba	~	HoldingRegister	~	0.01		
		DC Voltage	12290		uint16_ba	~	HoldingRegister	~	0.01		
	V	o/p voltage	12291		uint16_ba	~	HoldingRegister	Ŷ	1		
	V	o/p current	12292		uint16_ba	~	HoldingRegister	Ý	0.1		
	M	RPM	12293		uint16_ba	~	HoldingRegister	~	1		
		output P	12294		uint16_ba	~	HoldingRegister	~	0.1		
		para 0	0		uint16_ab	~	HoldingRegister	~	1		
	V	para 1	1		uint16_ba	~	HoldingRegister	~	1		
		para 2	2		uint16_ba	~	HoldingRegister	~	1		
		para 3	3		uint16_ba	~	HoldingRegister	~	0.01		
		para 4	4		uint16_ba	~	HoldingRegister	~	0.01		
	V	para 5	5		uint16_ba	~	HoldingRegister	~	0.01		
	Z	para 6	6		uint16_ba	~	HoldingRegister	~	0.01		
	1 1 1	para 7	7		uint16_ba	~	HoldingRegister	~	1		
		para 8	8		uint16 ba	~	HoldingRegister	~	1		~
		GENERATE SLA	VE		LO	AD SLAVE			CL	EAR	

2) Device Configuration Screen:

You can easily configure up to 10 nos. or more Modbus supported device, All Device separately add with unique device identification no. and communication address.

You have to set following parameters in this screen.

- Primary URL (eg. https://trackso.in/8080)
- Log interval in seconds
- Slave comm. Address
- Mode RTU/Ascii

After Setting all parameters you can generate parameter file (Json format) which will save for future use.

			DEVICE		N V I.U				
enerator	Device	e Generat	or Connection Configure Time Zone	e and APN					
	1							-	
			Log Interval(seconds) :	120			19	~	
			Primary URL :	https://iot.g	juru.in:8080				
	-		0	1					
			Secondary URL :						
SR. No.	EN	Browse	File Name	DeviceID	DeviceSlaveID	DeviceType	DeviceName	Mode	_
1		*****	C:\Users\Chetan\Desktop\Configuration\CHF100A.dscptr	2019020002	1 ~	ритр	gd100_1	RTU	~
2		[]	C:\Users\Chetan\Desktop\Configuration\GoodWE_INVT.dscpt	2019030016	2 ~	invtr	goodwe	RTU	39
3			C:\Users\Chetan\Desktop\Configuration\invt.dscptr	2019020005	3 ~	invtr	invt	RTU	~
4			C:\Users\Chetan\Desktop\Configuration\Weather_HTS500.dsc	2019030001	4 ~	weather	HTS500	RTU	~
5			C-\Users\Chetan\Desktop\Configuration\wether_unit.dscptr	2019030001	5 ~	weather	HTS500	RTU	~
6					1 ~			RTU	
7					1 ~			RTU	
8					1 ~		1	RTU	~
9					1 ~			RTU	~
10					1 ~]	RTU	ų
					10%				

3) Connection Screen: After Generating Device file (Json format), you can connect RMU with PC/laptop via USB & set proper Port connection, Baud rate, Parity bit & Stop bits.

5				DEVICE CONFIG	GURATOR V	1.0				- 0 X
Slave Generator	Device Generator	Connection	Configure	Time Zone and A	APN					
			Co	mPort :			~	0		
			Bau	idRate :		115200	~			
			P	arity :		None	~			
			Sto	opBits :		One	~			
			Co	onnect		DisConne	ct			

4) Configure Screen: When Device will connect with PC/Laptop, you can download configure file (.Json) to RMU.

Further you have option to set Non-SSL/ SSL connection & authorization key.

	Erase Flash	Start Addre	ess(Hex)	End A	ddress(Hex)	
		00000		FFFFF		
Browse	File Name		Addres	s(Hex)	Size(Hex)	Download
	:\Users\Chetan\Desktop\Confi	guration\10gc	00000	2CB88		
	SSL Conne	ction				
	KEY Supp	ort				
	KEY Nam	e:				
	KEY Nam KEY Valu	e:				

DEVICE CONFIGURATOR V1.0

5) Wi-Fi Network Setup Tool:

Slave Generator Device Generator Connection Configure Time Zone and APN

<u>8</u>			DEVICE CONFIGURATOR V1.0	- 3 X
Slave Generator Device Ge	nerator Connection	Configure	Time Zone and APN	

Time Zone :	(UTC+05:30) Chen	inai, Kolkata, I	Mumbai, New Dell	hi ~
tz Database Time Zone :		Asia/ł	Kolkata	
UTC Offset :	HH:	5	MM :	30
READ ALL		WRIT	EALL	
	internet	•		
APN :	internet	t		
APN : User Name :		t		
APN : User Name : Password :		t		

SMS Commands

Restart: SYSRST

Set APN by SMS: SETAPN, APN, USER_NAME, USER_PASSWORD