

Motor IOT System

User Manual (v2.70)

Artesis Motor Condition Monitoring Systems





PS.01 KL.26 REV:00

Artesis A.S 2020

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1. LOGIN PAGE

Welcome! Please login. ID	Welcome! Please login. ID ADMIN •	Welcome! Please login. ID ADMIN • Password
Please login. ID	Please login. ID ADMIN	Please login. ID ADMIN T Password
U	ADMIN T	ADMIN Password
	ADMIN .	ADMIN •

- > Default address is http://localhost:3002, http://127.0.0.1:3002 or http:// [IP address]:3002.
- > Enter company name (ID) and select Admin or Guest. Enter password and click [Login] button.
- Admin and Guest both can see every page on web server, but Setting page is only visible in Admin account and Admin can insert, modify and delete the equipment information.
- If login failed 5 times in 30 minutes, login will be restricted for 5 minutes. Login access restrictions apply to the IP address.
- Guest's default password is "1111". For Admin password, contact Artesis.



2. MAIN SCREEN

🔳 🖷 Motor IOT System		3		W	elcome, admin !	☞ Edit Notice 🔹 I	Back to admin 🕒 Lo
Equipment status info	Diagnosis list	Status summary		STOP	🕐 🔿 NO DATA 👍 OK	/ Learning 🐥 Watch 🥻	Fault ALARM LIS
ealtime Comm Error	Yesterday	Name	Status	Power factor	Total run hour	Total watt hour	Active power
Committenor	Commin Error	RD_GEMS6_Device_1		0.00%	0 day 19 hours	0.00kWh	0.00kW
		RD_GEMS5_Device_1		0.00%	0 day 0 hours	6.00kWh	0.00kW
		RD_moxa_Device_1		93.40%	0 day 7 hours	6.21kWh	0.77kW
Alexa Facilitation 0	Altern Ferderson A	RD_moxa_Device_2		93.60%	0 day 6 hours	5.06kWh	0.80kW
Watch Equipment: 0	Watch Equipment: 0	RD_sim_Device_0		90.00%	5 day 20 hours	4,838.63kWh	34.50kW
Total Equipment: 4	Total Equipment: 6	RD_sim2_Device_0		90.00%	5 day 19 hours	4,824.25kWh	34.50kW
Henry company (ct. bbth, ct. blaux)	Lisase sauls (Linit Mills)	Total	untthour (Un	in Liatha			
Usage compare (yr. kwn, y2: Hour)	Usage rank (Unit: KWN)	Total	watt nour (On	IC KVVIIJ			
] [1	нс	URLY DAIL	MONTHLY			
		1.0			Total watt hour pe	r hour	
		0.8					
		0.4					
		-0.2					
		-0.4					
		-0.8 -1.0					
2020-02-20 No data No data			1.30 400 +30 10	* 19 ¹⁸⁰ 19 ²⁰⁰	13020° 131000 13100	2 13 00 13 00 13 00 13 1	131 100 - 20 ¹⁰
WattHR RunningHR	RD_moxa_Device_ RD_moxa_Device_ RD 2 1	_GEMS6_Devic	10 ¹⁰ 00	1000° 1000° 100	2000 2000	2000 2000 2000	2020 ¹⁰ 1020 ¹⁰
* Usage comparison from 0 to reference time.							

- (1) Logo and company (account) name.
- (2) Dashboard, Management, Detailed Info, Trend, Daily Analysis, Monthly Analysis, Admin Setting and Setting Menu (Setting Menu is not accessible in Guest account)
- (3) This section will be changed by menu.
- (4) [Log out] button to log out.



3. DASHBOARD



Dashboard page shows diagnosis and usage status of all equipment.

No	Section	Description
1	Equipment status info	This chart shows all the equipment status of today and yesterday.
2	Status summary	This table shows current status of all equipment.
3	Alarm list	The button opens pop-up window that shows existing faults list.
4	Usage compare	The charts show usage comparison by the date.
5	Usage rank	The charts show weekly usage ranking by equipment.
6	Total watt hour	The chart shows a quick view of the total active power usage flow by hour, day and month.
7	Diagnosis list	The button opens pop-up window that shows a real-time diagnosis status of all equipment.



3.1 Equipment Status Info



This shows a status of all equipment. Today chart shows real-time status. Yesterday chart shows most critical status that happened yesterday.

ITEM	DEVICE TYPE	COLOR	DESCRIPTION
NO DATA/ STOP	MCM/eMCM	Blue	Does not have enough data to generate diagnostic information or motor is not running.
LEARNING	MCM/eMCM	Light blue	Motor is learning or updating.
ОК	MCM/eMCM	Green	Motor is working as expected.
WATCH LINE	MCM/eMCM	Yellow	Temporary changes in supply voltage cause this alarm. If alarm is persistent check for harmonic levels, capacitors, isolation of cables, motor connector or terminal slackness, loose contactors, etc.
WATCH LOAD	MCM/eMCM	Yellow	If the process load has not been altered deliberately, check for leakage, valve & vane adjustment, pressure gauge faults, manometer, dirty filters (fans, compressors), etc.
EXAMINE 1	MCM/eMCM	Orange	Plan Maintenance (First Level Alarm): There are developing mechanical and/or electrical fault(s). Although the level of the measured condition parameters is not critical yet, an inspection should be carried out and maintenance to be scheduled within 3 months.
EXAMINE 2	MCM/eMCM Red		Do Maintenance (Second Level Alarm): The level of the measured condition parameters is now critical, and an inspection should be carried out and maintenance scheduled immediately.
COMM ERROR	MCM/eMCM	Gray	Communication error

Motor status is displayed as follows:



3.2 Status Summary

Status summary		S III S	TOP 🔅 NO DATA 🔞 OK	🛙 Learning 🐥 Watch 🥻	Fault ALARM LIST	
Name	Status	Power factor	Total run hour	Total watt hour	Active power	*
EPS_AG_3201D	A	74.16%	186 day 4 hours	133,816.38kWh	26.27kW	L
EPS_RV_5801		94.65%	183 day 15 hours	1,006.94kWh	1.66kW	L
ABS1_SN_6634		0.00%	24 day 20 hours	8,331.71kWh	0.00kW	L
ABS3_PU_8234	*	79.68%	18 day 5 hours	27,180.98kWh	66.95kW	L
ABS1_SC_6662A	-	50.58%	28 day 4 hours	19,264.95kWh	31.13kW	
ABS3F_MC_8601		59.72%	81 day 6 hours	37,224.60kWh	20.38kW	-

This shows a status summary of all equipment. STOP means that equipment has stopped and NO DATA means that the equipment have no data to show.

The list of unit and description by items.

ITEM	UNIT	DESCRIPTION
STATUS	-	It shows equipment's current status.
POWER FACTOR	%	It shows equipment's current power factor.
TOTAL RUN HOUR	Day, hour	It shows equipment's total running hours up to now.
TOTAL WATT HOUR	kWh	It shows equipment's total watt hours up to now.
ACTIVE POWER	kW	It shows equipment's current active power.

3.3 Alarm List

1	Fault list		
	Equipment	Time	Description
	renault_PS_2	2019-09-04	Loose found/Components, Unbal/Misal/Coupling, Trans element/Driven equip,
	renault_PS_2	2019-09-03	Unbal/Misal/Coupling, Trans element/Driven equip, Loose found/Components,
	renault_PS_2	2019-09-02	Loose found/Components, Unbal/Misal/Coupling, Trans element/Driven equip,
	renault_PS_2	2019-08-31	Unbal/Misal/Coupling, Trans element/Driven equip, Internal electrical fault, External electrical fault,
	renault_P5_2	2019-08-30	Loose found/Components, Unbal/Misal/Coupling, Trans element/Driven equip,
	renault_PS_2	2019-08-29	Loose found/Components, Unbal/Misal/Coupling, Trans element/Driven equip,
	renault_PS_2	2019-08-28	Loose found/Components, Unbal/Misal/Coupling, Trans element/Driven equip,
	renault_PS_2	2019-08-27	Unbal/Misal/Coupling, Trans element/Driven equip, Loose found/Components,
	renault_PS_2	2019-08-26	Loose found/Components, Unbal/Misal/Coupling, Trans element/Driven equip,
	renault_PS_2	2019-08-25	Unbal/Misal/Coupling, Trans element/Driven equip,
	1 2 3 4 5	6 7	

Click [Alarm list] on 3.2 view. This pop-up page shows existing fault list by equipment and date.



3.4 Usage Compare



The chart shows total usage from the midnight to the current hour. It compares the usage and running hours of today, previous day and previous week. The unit of usage is kWh and unit of running hours is hour. The reference time is shown in a yellow box.

3.5 User Rank



The chart shows usage for a week. A maximum of three equipment will be shown. The unit of usage is kWh. The reference time is shown in a yellow box.



3.6 Total Watt Hour



Press [Daily], [Monthly], [Hourly] button and check usage by hour, day and month. It shows the total usage of all equipment that operated at a specific time. The unit of usage is kWh.

3.7 Diagnosis List

Real-time Diagnosi	is List								
Equipment	Update Time	Loose foundation / Components	Unbalance / Misalignment / Coupling	Transmission element / Driven equipment	Bearing	Rotor	Loose windings / Stator / Short circuits	Internal electrical fault	External electrical fault
renault_PS_1	2019-10-25 10:46	ОК	ОК	ОК	ОК	Warning	ОК	Warning	Warning
renault_PS_2	2019-10-25 10:48	ОК	ОК	ОК	ОК	ОК	ОК	ОК	ОК

This shows a real-time diagnosis status of all equipment.



4. DETAILED INFO

Category All Category	Select Equipment	COCACOLA_1 Description:	Maintenance Info. PSD Report EQUIPMENT IMAGE	
Status Information 6	8 9 EVENT LIST FAULT LIST	1	Active power(kW)	2 hours ago.
Communication OK	Date Eve 2019/10/07 08:30:22 Diaj 2019/10/07 08:29:19 Mot	ent type Description 7 gnosis OK tor Motor On	100- 130- 130- 131- 132- 130- 140- 140-	
Mode :: Monitor	2019/10/07 08:29:19 Alar	rm MNOT_RUNNING	144 - 149 - 199 -	10-08 07:45
Power factor	THD 2 3%	Frequency	Physical parameters Active power (kW) Total running hour Total Watt hour (KWh) 159.52 192day 6hours 716,361.68	2 hours ago.
0 100	0 21070 30	0 100	Diagnosis parameters OK / ALARM	2 hours ago.,
Voltage	Current 279.08	Voltage/Current unbalance	O Loose found/Components O Unbal/Misal/Coupling O Trans element/D Bearing Rotor O Loose wind/Stato	riven equip r/Short cir
S 214.35	т 281.79	Durr 0.64%	Internal electrical fault External electrical fault Others	

Parameter	Description
[1] Equipment selection	Select an equipment. Only activated equipment are displayed in the list.
[2] Maintenance Info	Show and edit maintenance information on this page. Only admin can see and edit.
[3] PSD chart	The button opens pop-up window that shows PSD (Power Spectral Density) chart of the selected equipment.
[4] Report viewer	The button opens pop-up window that shows diagnosis report of the selected equipment.
[5] Equipment image	The button opens pop-up window that shows registered equipment image. This button appears only for equipment that has completed image registration on setting page of a selected equipment.
[6] Status information	The box shows current status of a selected equipment.
[7] Event list	This table shows current changes in diagnostic status of a selected equipment. A maximum of three changes will be shown.
[8] Event list button	The button opens pop-up window that shows all the status changes.
[9] Fault list button	The button opens pop-up window that shows all the fault existence.
[10] Active power	The chart shows active power of a selected equipment.
[11] Physical parameters	The box shows physical parameters of the selected equipment.
[12] Diagnosis parameters	The box shows diagnosis parameters of the selected equipment.



4.1 Equipment selection

Category	All Category	\sim	Select	TA3000 CIKISI-1	~
			Equipment		

4.2 Maintenance Information

				Service and Service			
quipment Name				Equipment Capacity			
RPM				Frequency			
/iew Add							
# Schedule	Component Name	Component Model	Problem		Exchange Reason	Check Items	Administrator
	Rearing	4545	ftf		maint	4	1251

Equipment Info section, list look up and edit section and list add section is shown on a pop-up page. Equipment info section shows name, capacity, voltage, current, RPM and frequency.

On the list look up section, you can look up, modify and delete registered a maintenance data. To modify data, select the check box above the number to be modified, change each item, and press the [MODIFY] button. To delete, select the check box on the number to delete and press the [DELETE] button.

On the add section, you can add a maintenance data. Fill up all items and press the [ADD] button.



4.3 PSD Chart



The PSD page presents Power Spectral Density (PSD) plots. Switch between linear and logarithmic amplitude scaling to make it easier to compare different regions of the plot.

The high, normal and equipment curves (which indicate thresholds for abnormal and normal condition based on observations of many different types of equipment) can be switched on and off with the check boxes at the top of the plot controls panel. Zoom controls allow the user to focus on a specific section of the plot.

Below is the list of color and description by item.

ITEM	COLOR	DESCRIPTION
HIGH	Red	It refers to the abnormal range of the standard model.
NORMAL	Green	It refers to the normal range of the standard model.
EQUIPMENT	Blue	It refers a PSD value acquired through learning.
INSTANT PSD	Black	It refers a PSD value acquired most recently.



4.4 Report Viewer

port			PDF page Save as Excel				
uipment Information							
Equipment Name	EPS_AG_3201D	Туре	Gems 5500				
/oltage Nominal	254 V	Current Nominal	120 A				
Frequency	51.4 Hz	RPM	1524 rpm	Report chart	Electrical parameters		
Report chart Electrical	parameters			Electrical para	meters		Average value for 1 day p
Report chart			2019-09-23 15:36:50	Status	Name	Value	Reference
				ОК	Power factor	0.75	
_			High	OK	Active power [kW]	31.67	
				ОК	Reactive power [kVar]	25.31	
				OK	Vrms [V]	225.87	Vn +- 10%
			Caution	ОК	irms [A]	58.84	<=I n + 10%
				OK	V Unbalance [%]	0.03	<=2.0
	•••••			ОК	I Unbalance [%]	0.24	<=5.0
				OK	Frequency [Hz]	54.40	
Loose Unb	Nence / Transmissio Bearing	Rotor Loose Internal	Esternal Other	ОК	THD [96]	2.31	<=5.0
Foundation Misal / 1/	grimen n Element / Driven Frances	Windings / Electrical Stator / Fault	Electrical Faule	OK	3th harmonic [96]	0.16	<=5.0
Learn:	19 /	earn Recent Grow Grow Recent:: 2019-09-20 -	2019-09-23	ОК	5th harmonic [%]	0.71	<=5.0
				OK	7th harmonic [96]	0.39	<=5.0
Report Box				ОК	9th harmonic [%]	0.21	<=5.0
Present state detect	ion ::			OK	11th harmonic [%]	0.16	<=5.0
After reviewing the fault, a	appropriate action must be taken wi	thin the next scheduled maintenance.		ОК	13th harmonic [%]	0.20	<=5.0

- > Equipment information: This shows an equipment's information.
- Report chart: Display data as a graph. The zone under yellow indicates that the data is [Normal]. The yellow zone indicates fault level of [Caution]. The red zone indicates fault level of [High].
- > In the chart, green bar represents [Learn data] and blue means [Recent data].
- The yellow box shows when the data has been updated. If the time exceeds a day, the box turns gray.
- > Electrical parameters: This shows the measured voltage, current, etc.
- > PDF page button: Moves to the PDF downloadable screen.
- Save as Excel: Provides report data numerically as Excel file.

4.5 Equipment Image

example.pdf										
	← Previous	→ Next	Q Zoom In	🔍 Zoom Out	100%	Page:	1	/2		
Renderin engine	ng	Bro	Exa	ampleFile Plat	tform(s)		Engin versio	ne on	CSS grade	
Gecko	Firefox	1.0		Win 98+ /	0SX.2+	1	.7		A	
Gecko	Firefox	1.5		Win 98+ /	OSX.2+	1	.8		A	
Gecko	Firefox	2.0		Win 98+ /	0SX.2+	1	.8		A	
Gecko	Firefox	3.0		Win 2k+ /	0SX.3+	1	.9		A	
Gecko	Camin	o 1.0		0SX.2+		1	.8		A	

PDF Viewer to show a registered equipment image.



4.6 Status Information



It shows diagnostic status, communication status, working status and mode of the equipment. The exclamation mark (!) icon means that the equipment is in an abnormal state. Press the icon and check details.

> First box shows diagnostic status. There is image by status.

STATUS	IMAGE
NO DATA/STOP	STOPPED
LEARNING	Learning
ОК	и ОК
WATCH LINE	🔔 Watch Line
WATCH LOAD	🔔 Watch Load
EXAMINE1	A Examine 1
EXAMINE2	A Examine 2

Second box shows communication status. There is image by status.

STATUS	DESCRIPTION	IMAGE
сомм ок	Communication is OK.	Communication OK
COMM ERROR	Communication has error.	Communication error

> Third box shows working status. There is image and description by status.

STATUS	DESCRIPTION	IMAGE	
RUNNING	Motor is running.	RUNNING	
STOP	Motor stopped.	STOP	



> Fourth box shows working status. Below is the list of descriptions by mode.

MODE	DESCRIPTION
IDLE	Idle state
CHECK	Check state
LEARN	Learn state
IMPROVE	Learn improve state
MONITOR	Monitoring state
UPDATE	Update state

> This pop-up page shows up when the user clicks the exclamation mark icon

[Description	
	Туре	Name
	Error	MEMALLOC
	Error	ZERO_DIVISION
	Alarm	VBALANCE
	Alarm	IBALANCE
	Warning	PHASE ORDERING

Warning descriptions

WARNING	DESCRIPTION
FREQUENCY RANGE	The measured frequency was different than the LEARN frequency.
RESIDUAL	An unexpectedly large value was calculated for the modeling error. This is
	generally an indication of an unstable line condition.
DATA LENGTH	Values for some quantities were checked and found to be outside their
	allowable limits.
PHASE ORDERING	Phase ordering is different from the values set.
UNSTABLE SYSTEM	Instability was detected for the system.

Alarm descriptions

ALARM	DESCRIPTION
VBALANCE	Voltage phase imbalance exceeds the set threshold.
IBALANCE	Current phase imbalance exceeds the set threshold.
V0_RMS_HIGH	R Phase voltage greater than the upper threshold.
V1_RMS_HIGH	S Phase voltage greater than the upper threshold.
V2_RMS_HIGH	T Phase voltage greater than the upper threshold.
V0_RMS_LOW	R Phase voltage less than acceptable (No voltage) limit.
V1_RMS_LOW	S Phase voltage less than acceptable (No voltage) limit.
V2_RMS_LOW	T Phase voltage less than acceptable (No voltage) limit.
I0_RMS_HIGH	R Phase current exceeds upper threshold limit.
I1_RMS_HIGH	S Phase current exceeds upper threshold limit.
I2_RMS_HIGH	T Phase current exceeds upper threshold limit.
MNOT_RUNNING	All currents were measured below their acceptable (No current) limits.
	Motor is not running.
MCON_FAULT	One or more currents were measured below their acceptable limits.



LINE_FAULT	One or two voltage phases were compatible with zero (below No voltage limit).
POWER_FAULT	All the voltage phases were compatible with zero (below No voltage limit).
UNSTBL_LINE	The power lines were not sufficiently stable to allow the algorithm to obtain
	data (amplitude and frequency variations of current and voltage were
	excessive).
GENERAL_ALARM	General fault consisting of one or more of:
	1) No data obtained
	2) No zero crossings detected
	3) Perfect phase balance (voltage or current)
PHASE_ORDER	The phase ordering used by diagnosis module is incorrect and must be
	rectified.
PHASE_ERROR	Voltage phase angles incompatible with 120° were detected.
PHASE_ANGLE	The measured phase angle between corresponding voltage and current
	channels was not in the range: 0 <= ϕ <= $\pi/2$
CURR_PHASE_ERROR	The ordering of the current phases was different than that of the voltage
	phases or the angle between two phases was not 120 ^o
DATACQ_ERROR	Division by zero was attempted during data acquisition.
RANGE_ERROR	An invalid value was detected for one or more of the following quantities
	during data acquisition:
	1) Calibration constants
	2) balance values
	3) admittance
	4) Estimated physical parameters
FREQUENCY_RANGE	(CHECK MOTOR and LEARN only).
	The measured frequency differed from the nominal value.
FREQUENCY_TOL	Invalid value for the mean frequency
NOISY_DATA	The estimated admittance is inconsistent with the measured RMS values for
	voltage and current. This usually indicates excessive noise in the data.

Error descriptions

ERROR	DESCRIPTION
ERR_NONE	No error
ERR_MEM_ALLOC	The dynamic memory manager failed in a request to allocate a block of
	memory.
ERR_UNEXPECTED	An unexpected or general error occurred.
ERR_ZERO_DIVISION	The algorithm attempted to perform a division by zero.
ERR_FLASH_WRITE	There was an error attempting to write to flash.
ERR_ILLEGAL_SQRT	The algorithm attempted to form the square root of a negative number.
ERR_INITIALIZATION	Initialization was not properly finished, or an error occurred.
ERR_NO_DATA	There is no data present.
ERR_DATACQ	An error occurred during data acquisition causing insufficient data to be acquired.
ERR_PARAMETER	An illegal value was calculated for an algorithm parameter.
ERR_FLASHFAIL	An attempt to read or write from the flash RAM gave an error indicating a faulty flash.
ERR_CLUSTERUPDATE	An illegal cluster value was detected.
ERR_RECOVERY	Data stored in the flash RAM is corrupted and cannot be used.
ERR_STABILITY	Clusters used by the algorithm are inherently unstable.
ERR_VOLTAGERANGE	An illegal voltage value was detected.



4.7 Event List

EVENT LIST FAULT LIST		
Date	Event type	Description
2019/09/23 14:47:10	Diagnosis	Examine 1
2019/09/23 14:47:10	Alarm	MNOT_RUNNING
2019/09/23 14:37:15	Diagnosis	STOP

This section shows recent event occurrences. Press [EVENT LIST] button to check the entire event status from the start of the activation to the recent.

4.8 Event List Button

EPS_AG_3201D's event list		Export as Excel Download
Event Time	Event Type	Event Description
2019/09/23 14:47:10	Diagnosis	Examine 1
2019/09/23 14:47:10	Alarm	MNOT_RUNNING
2019/09/23 14:37:15	Diagnosis	STOP
2019/09/23 14:37:15	Alarm	MNOT_RUNNING
2019/09/23 13:26:19	Diagnosis	Examine 1
2019/09/23 13:24:14	Diagnosis	STOP
2019/09/23 12:31:02	Diagnosis	Examine 1
2019/09/23 12:30:30	Diagnosis	STOP
2019/09/23 04:12:18	Diagnosis	Examine 1
2019/09/23 04:12:18	Alarm	MNOT_RUNNING
1 2 3 4 5 6 7 8 9 10 N	ext	

You can move to the page with a number button at the bottom.

This shows the event list for the entire period. Click [Export as Excel] button to create [Download] button. Click [Download] button to download the event list of the last 30 days as Excel file.



Event type descriptions

ТҮРЕ	DESCRIPTION
DIAGNOSIS	Diagnosis status
ERROR	Error refers to failures of the MCM hardware and firmware rather than the monitored motor or generator. When the MCM identifies an error condition it makes several attempts to recover, and only after these attempts fail an error message is generated. All errors stop the MCM from functioning and must be cleared before proceeding further. Errors are indicative of a serious problem within the MCM and their source should always be investigated. An error indication consists of two parts: firstly, the displayed error string; and secondly the associated error number. When reporting equipment malfunctions, please be sure to include both the message and its associated number. Please refer to the appendix for a full list of error messages.
ALARM	Alarm provides information specific to the motor being monitored. It indicates faults caused by incorrect connections to the motor, the supplied line voltage and/or motor currents being outside the specified limits and other conditions that can prevent the MCM from correctly determining the condition of the motor or generator. Alarms do not cause the MCM to stop monitoring completely but are generally indications that there is a problem that should be investigated and corrected before the MCM can function to its full capability. For instance, if the motor stopped MCM will yield a "Motor Not Running" alarm (Alarm 0x800) and MCM will not process the data until it starts running again. Once the motor starts, MCM will automatically detect the state and continue from where it left.
WARNING	Warning informs the user that non-critical conditions have arisen that the
	user should be aware of but do not affect the performance of the MCM.
COMMUNICATION	It shows communication status.
PROTECTION	It shows protection changes.

4.9 Fault list

Fault Event	
EPS_AG_3201D's fault list	Export as Excel
Fault Time	Fault Description
2019-09-23	Loose found/Components, Trans element/Driven equip, Bearing, Unbal/Misal/Coupling,
2019-09-22	Loose found/Components, Trans element/Driven equip, Bearing, Unbal/Misal/Coupling,
2019-09-21	Loose found/Components, Unbal/Misal/Coupling, Trans element/Driven equip, Bearing,
2019-09-20	Loose found/Components, Unbal/Misal/Coupling, Trans element/Driven equip, Bearing,
2019-09-19	Loose found/Components, Trans element/Driven equip, Unbal/Misal/Coupling, Bearing,
2019-09-18	Loose found/Components, Trans element/Driven equip, Bearing,
2019-09-17	Loose found/Components, Trans element/Driven equip, Unbal/Misal/Coupling, Bearing,
2019-09-16	Loose found/Components, Unbal/Misal/Coupling, Trans element/Driven equip, Bearing,
2019-09-12	Loose found/Components, Unbal/Misal/Coupling, Trans element/Driven equip, Bearing,
2019-09-11	Loose found/Components, Unbal/Misal/Coupling, Trans element/Driven equip, Bearing, Internal electrical fault, External electrical fault,
1 2 3 4	5 6 7 8 9 10 Next

On [Fault] tab, it shows the daily fault diagnostics for the entire period. Click [Export as Excel] button to create [Download] button. Click [Download] button to download the fault diagnosis list of the last 30 days as Excel file.



Fault Event		
EPS_AG_3201D's event li	list	Export as Excel
Event Time	Event Description	
2019-09-23	Examine 1	
2019-09-22	Examine 1	
2019-09-21	Examine 1	
2019-09-21	Watch Line	
2019-09-20	Examine 1	
2019-09-19	Examine 1	
2019-09-18	Examine 1	
2019-09-17	Examine 1	
2019-09-16	Examine 1	
2019-09-12	Examine 1	
1 2 3 4	5 6 7 8 9 10 Next	

On [Event] tab, it shows only Watch Line / Watch Load / Electrical Fault / Mechanical Fault / Examine1 / Examine2 from the list of events that occurred during the entire period. Click [Download] button to download the event list of the last 30 days as Excel file.

4.10 Active Power



The chart shows active power changes in real-time. The yellow box shows when the data has been updated. If the time exceeds 15 minutes, the box turns gray.



4.11 Physical Parameters



It displays real-time physical parameters of an equipment. The yellow box shows when the data was updated. If the time exceeds 15 minutes, the box turns gray.

Each parameter has a set high or low limit value. The line with a text 'Low' is low limit, the line with a text 'High' is high limit. If the end of the bar graph is in red or blue, it indicates an anomaly. It's normal when it is within white. If no ranges are written on the chart, then check the bar of the graph. It's normal when it is green. If the bar is red, that means out-of-range.

> Below is the list of references by parameter. Check the equipment when it's out-of-range.

PARAMETER	REFERENCE
POWER FACTOR (%)	•
THD (%)	<= 5.0
FREQUENCY (HZ)	-
VOLTAGE	Minimum: Vn -10% / Maximum: Vn +10% (for line driven)
CURRENT	<= in +10 %
VOLTAGE BALANCE	<= 2.0
CURRENT BALANCE	<= 5.0

4.12 Diagnosis parameter

Diagnosis parameters OK / ALARM		7 minutes ago.
Loose found/Components	Unbal/Misal/Coupling	Trans element/Driven equip
Bearing	Rotor	Loose wind/Stator/Short cir
Internal electrical fault	External electrical fault	Others

If the user wants to check the full name of the item, mouse hover on the box. The box turns red when alarm occurred. The exclamation mark (!) icon means the parameter has existing fault. The yellow box shows when the data has been updated. If the time exceeds 15 minutes, the box turns gray.

The latest 1344 (about a month) data are drawn in chart when the box is clicked.





> Below is the list of descriptions by parameter.

PARAMETER	DESCRIPTION
LOOSE FOUNDATION/ COMPONENTS	Check for loose motor foundation, loose motor components, looseness or excessive tolerances in driven components. Mechanical faults such as misalignment, physical looseness and imbalance not only adversely affect a motor's performance and longevity but also its efficiency.
ROTOR	Rotor problem. Check for cracked or loose rotor / rotor bars.
UNBALANCE/ MISALINMENT/ COUPLING	Misalignment / unbalance. Check for Misalignment, unbalance, bearing, coupling, and motor shaft. Correct shaft alignment ensures the smooth, efficient transmission of power from the motor to the driven equipment.
EXTERNAL ELECTRICAL FAULT	External electrical fault. Check for cabling problems, contactor problems, compensation system, and bad motor connections. Voltage imbalance, over- and under-voltage, low power factor, undersized conductors, leakage to ground, and poor connections–can account for up to 4% of total plant electrical energy consumption.
INTERNAL ELECTRICAL FAULT	Internal electrical fault. Check for rotor / stator problems, short circuits, isolation problems, winding slackness, etc. Heating and increased resistance due to stator, rotor and other electrical faults cause deteriorating conditions and reduced efficiency.
TRANSMISSION ELEMENT/ DRIVEN EQUIPMENT	Transmission problem. Check for transmission element(s) coupling, driven equipment, belt, pulley, gear box, and fan / pump impeller. Efficiency is dependent on pulley size, driven torque, under or over belting, and V belt design and construction. Efficiency deteriorates by as much as 5% over time if slippage occurs.
BEARING	Bearing Problem. Bearing(s) should be checked. The presence of bearing defects often results in reduced efficiency, or even severe damage, of the motor under consideration.
LOOSE WINDINGS/ STATOR/ SHORT CIRCUITS	Stator related problem. Check for stator, short circuit, winding slackness, isolation problems, and partial discharge. Heating and increased resistance due to stator, rotor and other electrical faults cause deteriorating conditions and reduced efficiency.
OTHERS	PSD (Power Spectral Density) plot indicates abnormalities. Faults should be identified by checking trends and frequency spectrum.



5. MANAGEMENT

te Period Select					
2019-09-23	From	30days • Date per	iod Category	All Category	*
SHOW CHART					
nagement view 2					
No Data OCK OFault OW	atch Line / Load Communication	OFF			
nagement view 2	atch Line / Load Communication	OFF			Loose fo
nagement view 2 No Data OK Fault W EPS_AG_3201D Lo EPS_RV_5801	atch Line / Load Communication	OFF			Loose fo
nagement view 2	atch Line / Load Communication	OFF nd/C 2019-06-03 - 2019-06-12 9 days			Loose fo
nagement view 2	atch Line / Load Communication	OFF nd/C 2019-06-03 - 2019-06-12 9 days			Loose fo Lo
nagement view 2 No Data OK Fault WW EPS_AG_3201D IIIIIII IIIIIIII IIIIIIIII ABS1_SN_6634 ABS3_PU_8234 ABS1_SC_6662A IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	atch Line / Load Communication	OFF nd/C 2019-09-03 - 2019-09-12 9 days			Loose fo Lo
anagement view 2 No Data OK Fault W EPS_AG_3201D 1 EPS_RV_5801 ABS1_SV_6634 ABS1_SC_6662A ABS1_SC_6662A ABS1_SC_6661	atch Line / Load Communication	OFF nd/C 2019-09-03 - 2019-09-12 9 days			Loose fo Lo

1 This is a screen where you can select the time interval to view the entire list of equipment status.

(2) This is a screen where you can check the status of the entire list of equipment as a chart composed of timelines.

5.1 Date Period Selection

Ê	201	9-09	-23		Fron	n	
SHOW	0	SE	PTE	MBE	R 20	19	0
	Su	Мо	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6	7
	8	9	10	11	12	13	14

The current date is selected by default and you can set the base date with the mouse. Days after current date cannot be selected. The drop-down menu on the right lets you choose how many days of data to view on a given day. You can view at least 1 day and up to 30 days.

5.2 Management View



Each state is colored. You can check the color by status at the top of the chart. The data to the right is the latest data. Hover over the Fault state to see the fault entry.



6. TREND

Equipment Sel	ect	1							Export as Excle Download
Category	LG	CHEMYS ¥	Equipment	EPS	_AG_3201D(EP 🔻	Secon Equipr	l nent		4
Start		2019-09-23	End date	m	2019-09-23	Mote	or on/off		
Select parame	ters (N	laximum 5 field)							
Motor Statu	S			🗆 In	ternal electrical fault		Vr Rms	Voltage unbalance	THD
Loose found	dation/	Components		E E	xternal electrical fault		🗆 Vs Rms	Current unbalance	3th Harmonic
🗷 Loose windi	ings/St	ator/Short circuits		0	ther		🗉 Vt Rms	Active power	5th Harmonic
Unbalance/I	Misalig	nment/Coupling					🗉 Ir Rms	Reactive power	7th Harmonic
🔲 Transmissio	n elem	nent/Driven equipm	ent 🕗				🗉 Is Rms	Signal frequency	🗏 9th Harmonic
Bearing							🗆 It Rms	Power factor	🗉 11th Harmonic
Rotor									13th Harmonic
SHOW CHART									
Trend chart :	3							Loose wind	ings/Stator/Short circuits threshold : 8
					Loose windings	/Stator/Sho	rt circuits		
8									
7									
6									
5									
4									
		\sim				Δ			
1			$\Lambda \int$		\sim	JV	\sim		$\gamma \mathcal{M}$
000,000	000	01.31 02.01 02.31 02.01	02.22 04.14 04.44 05	A 05.4	- BIA BAA DINA DIAA	Bin Bin	BRIA BRAA NO	A 1014 0111 0 114 0 1210 0200	2.50 2.540 2.400 2.600 2.600 2.600
and Constant and					all' and and and and and	1,010912,05	ar and not and a	BL BBL BBL BBL BBL, BBL, BBL, BBL,	ADAL ADAL ADAL ADAL ADAL

This shows various parameters about a specific equipment at a glance as a trend chart. Selectable items vary depending on the type of equipment.

No	Section	Description						
1	Equipment and date selection	Select equipment and date. Second chart is selectable.						
2	Soloct paramotors	Selectable parameters by equipment are displayed.						
Z	Select paralleters	Maximum 5 parameters.						
2	Trond chart	This shows the chart of the selected equipment, period and						
3		parameters.						
4	Export as Excel	Export data of selected fixtures and dates to Excel.						

6.1 Select Equipment and Dates

Category	LGCHEMYS T	Equipment	EPS_AG_3201D(EPS	Second Equipment
Category2	LGCHEMYS T	Equipment2	EPS_AG_3201D(EPS	
Start date	2019-09-23	End date	2019-09-23	Motor on/off

Selecting an equipment automatically sets the minimum selectable date (lower left) and the maximum date (lower right). The current date is selected by default and set the base date with the mouse. Days after current date cannot be selected. Check [Second equipment] and select a second chart for comparison. Only equipment of the same type with first one can be selected.



> Press the [Motor ON/OFF] button to check the ON / OFF status of the equipment.

Equipment Info.						
Equipment name: ABS1_SN_6634	Start date: 2019-09-23 00:00:09	End date: 2019-09-23 16:20:01				
1.1 1.2 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1 0 0 0 0 0 0 0 0 0 0 0 0 0						
09-23 000009 09-23 014004 09-23 032005 09-23 050006 09-23 064005 09-23 062006 09-23 100007 09-23 114007 09-23 132009 09-23 150010						

6.2 Select Parameters

Select parameters (Maximum 5 field)								
Motor Status	Internal electrical fault	Vr Rms	Voltage unbalance	THD				
Loose foundation/Components	External electrical fault	Vs Rms	Current unbalance	🗏 3th Harmonic				
Loose windings/Stator/Short circuits	Other	Vt Rms	Active power	🗏 5th Harmonic				
Unbalance/Misalignment/Coupling		🔲 Ir Rms	Reactive power	🗏 7th Harmonic				
Transmission element/Driven equipment		🗆 Is Rms	Signal frequency	🗏 9th Harmonic				
Bearing		It Rms	Power factor	11th Harmonic				
Rotor				🗏 13th Harmonic				

Select the parameter you want to plot after the date and equipment selection.



6.3 Chart



This chart is displayed when all equipment, dates and elements are selected. You can make it visible or invisible by clicking the name of the element located at the top center. Magnification is not supported.

If you select only one diagnostic item, the value of that item will not rise above 50. To see raw data that is not limited to 50, Select two or more diagnostics.



7. Report All Equipment

20





08 09

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Daily	Daily summary 9 Export monthly summary as Excel								
Date	Alarm(Times)	Usage(kWh)	Running hours	Average power factor (%)	Average active power (kW)	Maximum active power (kW)			
01	35	4,603.58	41 hours 58 minutes	53.71	58.92	79.14			
02	23	4,784.78	43 hours 55 minutes	49.66	55.86	79.29			
03	13	5.017.43	47 hours 57 minutes	58.50	62.58	79.48			
04	12	5,014.16	47 hours 50 minutes	58.48	62.46	79.50			
05	19	5,473.57	51 hours 26 minutes	56.44	60.55	79.31			
06	11	5,364.24	50 hours 48 minutes	55.73	59.42	76.67			
07	13	4,956.35	47 hours 58 minutes	58.53	60.95	76.83			
08	6	1,881.67	18 hours 21 minutes	58.70	60.97	76.84			
09	*		*	+5					
10									



No	Section	Description
1	Date selection	Select the report for the whole month by month.
2	Usage chart	This shows the percentage of usage of each equipment.
3	Usage rank	This shows the usage ranking of the whole equipment.
4	Alarm occurrence status	This table shows the number of alarm occurrences of the entire equipment.
5	Alarmed equipment counts	This shows how many equipment have alarmed on selected month.
6	Weekly usage	This shows the usage of the entire equipment by day.
7	Active power peak chart	This chart shows the daily active power peak of the month.
8	Daily usage and running hours chart	This show daily usage and uptime for entire equipment.
9	Daily summary table	You can see the daily summary table of the all equipment.

7.1 Date Selection



Select the report of the month. Only months in which data exists are displayed in the selection drop down.

7.2 Usage Chart



You can check the usage ranking of the equipment. Up to 10 equipment appear.



7.3 Usage Ranking

Rank	Name	Usage	Run hours
#1	KR_JJWATER_YP_PUMP_NO1_GEMS02	58,255.04	445 hours 22 minutes
#2	KR_JJWATER_M-2-03A_GEMS03	33,190.29	429 hours 57 minutes
#3	KR_JJWATER_YP_PUMP_NO3_GEMS01	16,558.56	119 hours 46 minutes

It shows the usage ratio of each equipment. The total usage is shown at the top.

7.4 Alarm Occurrence Status

Name	Alarm times
KR_JJWATER_M-2-03A_GEMS03	285 times
KR_JJWATER_YP_PUMP_NO1_GEMS02	188 times
KR_JJWATER_YP_PUMP_NO3_GEMS01	31 times

7.5 Alarmed equipment counts



7.6 Weekly usage



This shows the total usage per day (green bar) and the average per hour of the day (orange line). Hover over the mouse to see the exact usage.



7.7 Active Power Peak Chart



This shows the highest active power by day. Regardless of the type of equipment, only the highest peak is shown. If you hover over it, you can see in which equipment the peak occurred.

7.8 Daily Usage and Running Hours



This shows a daily usage and uptime for the selected month. Hover over the number to see the day of the week, exact usage, and uptime.

7.9 Daily Summary Table

Daily s	Daily summary									
Date	Alarm(Times)	Usage(kWh)	Running hours	Average power factor (%)	Average active power (kW)	Maximum active power (kW)				
01	36	5,609.41	52 hours 21 minutes	52.85	59.20	84.47				
02	41	4,986.56	47 hours 51 minutes	58.00	61.89	82.35				
03	47	4,977.92	47 hours 58 minutes	58.82	62.07	84.38				
04	41	4,992.32	47 hours 55 minutes	58.55	62.57	84.58				
05	24	5,258.12	48 hours 14 minutes	54.20	58.81	84.17				
06	33	5,395.67	50 hours 26 minutes	55.72	59.93	84.73				
07	28	6,257.20	56 hours 26 minutes	52.89	58.94	81.88				
08	16	6,183.41	56 hours 36 minutes	54.07	59.27	81.79				
09	4	5,144.98	47 hours 13 minutes	52.96	58.40	81.91				
10	15	6,055.98	56 hours 3 minutes	55.03	59.37	81.99				

The table shows a daily error occurrence status, usage, uptime, average power factor, average active power, and maximum active power at a glance. If no data exists, a – mark is displayed on table.



8. REPORT – INDIVIDUAL EQUIPMENT



Daily	/ summary	0	Export monthly summary as Excel				
Date	Examine1 (Times)	Examine2 (Times)	Usage(kWh)	Running hours	Average power factor (%)	Average active power (kW)	Maximum active power (kW)
01	0	0	0.00	0 minutes		-	•
02	0	0	0.00	0 minutes	•	•	•
03	0	0	0.00	0 minutes	-	-	•
04	0	0	0.00	0 minutes	-	-	-
05	4	0	491.04	3 hours 32 minutes	34.12	49.23	51.65
06	4	0	409.25	2 hours 57 minutes	34.59	51.22	52.26
07	0	0	0.00	0 minutes			•
08	0	0	0.00	0 minutes			



No	Section	Description
1	Date and Equipment Selection	Select a report for a specific equipment monthly.
2	Equipment Description	This shows the description of the selected equipment.
3	Status of alarm occurrence	This shows the alarm occurrence rate of the equipment.
4	Weekly usage	This shows the usage of the equipment by day.
5	Active power peak chart	This shows the daily active power peak of the month.
6	Daily usage and running hours chart	This show daily usage and uptime for the month.
7	Daily summary table	This shows the daily summary table of the whole equipment.

8.1 Date and equipment select



You can check the report for a specific month for a specific equipment. Only the months and equipment for which data is present appear in the selection window.

8.2 Alarm Occurrence Status



This the alarm occurrence rate and frequency of the selected equipment.

8.3 Equipment Description

Equipment name	renault_PS_1
Device type	Gems 5500
Gems DMS name	lgServer_ch10_Device_1
Description	

This shows the name, type, AES name and description of the equipment.



8.4 Weekly Usage



This shows the usage by day of the week. Hover over the graph to see the exact usage.



8.5 Active Power Peak Chart

This chart shows the highest active power by day.

8.6 Daily Usage and Uptime



This chart shows daily usage and uptime for the selected month. Hover over the number to see the day of the week, exact usage, and uptime.



8.7 Daily Summary Table

Daily	Daily summary						
Date	Examine1 (Times)	Examine2 (Times)	Usage(kWh)	Running hours	Average power factor (%)	Average active power (kW)	Maximum active power (kW)
01	0	0	0.00	0 minutes	-	-	-
02	0	0	1,016.38	17 hours 11 minutes	82.03	67.38	70.90
03	0	0	1,077.49	18 hours 32 minutes	81.97	67.06	68.52
04	0	0	1,069.71	18 hours 30 minutes	81.90	66.70	67.46
05	0	0	1,070.02	18 hours 32 minutes	81.93	66.74	67.40
06	0	0	1,096.10	18 hours 56 minutes	81.91	66.53	67.13

The table shows daily error occurrence status, usage, uptime, average power factor, average active power, and maximum active power at a glance. If no data exists, a – mark is displayed on table.



9. REPORT – CATEGORY



Daily summary 9 Export mort						
Date	Alarm (Times)	Usage (kWh)	Running hours	Average power factor (%)	Average active power (kW)	Maximum active power (kW)
01	35	4,603.58	41 hours 58 minutes	53.71	58.92	79.14
02	23	4,784.78	43 hours 55 minutes	49.66	55.86	79.29
03	13	5,017.43	47 hours 57 minutes	58.50	62.58	79.48
04	12	5,014.16	47 hours 50 minutes	58.48	62.46	79.50
05	19	5,473.57	51 hours 26 minutes	56.44	60.55	79.31
06	11	5,364.24	50 hours 48 minutes	55.73	59.42	76.67
07	13	4,956.35	47 hours 58 minutes	58.53	60.95	76.83
08	6	1,881.67	18 hours 21 minutes	58.70	60.97	76.84

No	Section	Description
1	Date selection	Select the report for the whole month by month.
2	Usage chart	This shows the percentage of usage of each equipment.
3	Usage rank	This shows the usage ranking of the whole equipment.
4	Alarm occurrence status	This table shows the number of alarm occurrences of the entire equipment.
5	Alarmed equipment counts	This shows how many equipment have alarmed on selected month.
6	Weekly usage	This shows the usage of the entire equipment by day.
7	Active power peak chart	This chart shows the daily active power peak of the month.
8	Daily usage and running hours chart	This shows daily usage and uptime for entire equipment.
9	Daily summary table	You can see the daily summary table of the all equipment.

9.1 Date selection

Check the report of the month you want. Only months in which data exists are displayed in the selection drop-down.

9.2 Usage Chart

This shows the usage ranking of the equipment. Up to 10 equipment appear.

9.3 Usage Rank

Rank	Name	Usage	Run hours
#1	B4_13	2,418.5	443 hours 18 minutes
#2	B4_11	2,289.2	442 hours 56 minutes
#3	SM2_1	938.7	349 hours 5 minutes
#4	BSM2_1	922.1	148 hours 16 minutes

It shows the usage ratio by equipment. The total usage is shown at the top.

9.4 Alarm Occurrence Status

Name	Alarm times
KR_JJWATER_M-2-03A_GEMS03	25 times
KR_JJWATER_YP_PUMP_NO1_GEMS02	99 times
KR_JJWATER_YP_PUMP_NO3_GEMS01	8 times

9.5 Alarmed Equipment Counts

9.6 Weekly Usage

This shows the total usage per day (green bar) and the average per hour of the day (orange line). Hover over the mouse to see the exact usage.

9.7 Active Power Peak Chart

This shows highest active power by day. Regardless of the type of equipment, only the highest peak is shown. If you hover over it, you can see in which equipment the peak occurred.

9.8 Daily Usage and Running Hours

This shows daily usage and uptime for the selected month. Hover over the number to see the day of the week, exact usage and uptime.

9.9 Daily Summary Table

Daily summary						Export monthly summary as Excel
Date	Alarm (Times)	Usage (kWh)	Running hours	Average power factor (%)	Average active power (kW)	Maximum active power (kW)
01	0	331.59	55 hours 48 minutes	68.34	11.93	21.87
02	0	335.08	58 hours 16 minutes	70.55	12.30	19.32
03	0	350.92	60 hours 54 minutes	67.37	11.70	23.07
04	0	342.34	61 hours 53 minutes	71.33	12.41	23.18

The table shows daily error occurrence status, usage, uptime, average power factor, average active power, and maximum active power at a glance. If no data exists, a – mark is displayed on table.

10. DAILY REPORT

Usage: 1,178.10kWh Usage rank Usage rank Tensult,P5,1 1,125 1,22 1,2	2019	9-09-19	's daily re	port				
Rank Name Vace #1 renault_P5_1 1,125 #2 renault_P5_3 31.5 #3 renault_P5_2 20.7	Usage: 1,178.10kWh		0kWh		Usage	e rank		
Alarm occurance Alarmed device count: 0					Rank	Name	Usage	Run hours
#2 renault_PS_3 31.5 #3 renault_PS_2 20.7					#1	renault_PS_1	1,125.9	18 hours 30 minutes
#3 renault_P5_2 20.7 #3 renault_P5_2 20.7 Alarm occurance Alarmed device count: 0 Name Alarm times renault_P5_1 0 times renault_P5_2 0 times				#2	renault_PS_3	31.5	18 hours 59 minutes	
Alarm occurance Alarmed device count: 0					#3	renault_PS_2	20.7	18 hours 11 minutes
Name Alarm times renault_P5_1 0 times renault_P5_2 0 times	Alarm) occurar	ice	Alarmed device count: 0				
renault_P5_1 0 times renault_P5_2 0 times	Name	A	larm times					
renault_PS_2 0 times	renault_PS_1 0 times							
	renault_PS	'S_2 0	times					
renault_PS_3 0 times	renault_PS	'S_3 0	times					

Day s	ummary					Export daily summary as Excel
Time	Alarm(Times)	Usage(kWh)	Running hours	Average power factor (%)	Average active power (kW)	Maximum active power (kW)
00:00	0	45.93	2 hours 38 minutes	90.52	30.92	67.34
01:00	0	0.65	43 minutes		-	-
02:00	0	0.00	0 minutes			
03:00	0	0.00	0 minutes		-	-
04:00	0	0.00	0 minutes			
05:00	0	0.00	0 minutes		-	-
06:00	0	57.07	1 hours 26 minutes	85.30	55.67	70.49
07:00	0	63.43	2 hours 59 minutes	90.44	35.68	67.84
08:00	0	63.31	2 hours 59 minutes	90.20	35.71	67.71

All features of the daily report are the same as the monthly report.

11. ADMIN SETTING

11.1 Update Settings

Manual update	
* Update equipment manually. It takes about 5 minutes to start update, and takes 24 hours approximately. The update history is automatically recorded in the maintenance list.	
Category	
renault_category •	
Equipment	
renault_PS_1 renault_PS_2 renault_PS_3	
Name * Device Name UPDATE	

Manual update of equipment (eMCM): Update the equipment manually.

11.1.1 Manual Update of Equipment (only eMCM)

Proceed with updating the equipment manually. Pressing the equipment name activates the [Update] button and pressing the button releases the control command. You can check whether the control is working normally in the event list of the precision diagnosis screen. When the update is complete, it is recorded on the Detail-Maintenance page.

Please insert an update reason.	Please insert an update admin name.
	1
OK Cancel	ОК Сапсе!

Pressing the [Update] button will prompt you to enter the reason for the update and the administrator's name. If not entered, the update will not proceed. The information you enter is recorded on the Detail-Maintenance page.

11.2 Report Settings

Sender setting				Alarm setting	
* Automatic reports should only be used as an aid to maintenance planning.			* Selected alarm prameters and update history are included in auto report e-mail.		
Name	Name 관리자			Parameters 🗷 Examine1	
Email address	ss motoriot.manager@gmail.com				✓ Examine2
Password * Password			Watch Load		
Smtp.host @ smtp.gmail.com			* E-mail includes alarms and update information that occurred in 24 hours.		
Port	587			Weekdays	✓ Monday
				🗹 Tuesday	
SOBMIT					✓ Wednesday
					Thursday
Receiver setting					✓ Friday
kwangmin@nteksys.com (김광민) ^					✓ Saturday
tommy@nteksys.com (오창훈) cruise@lguplus.co.kr (이종원)	Name	* Name			✓ Sunday
	Email address	* Email Address		Time	9:00 Send report hourly.
	ADD			Option	Send e-mail only when alarm occured
Receiver add					Send masked data.
					SUBMIT

No	Section	Description
1	Sender setting	Mail sender setting screen.
2	Receiver setting	Mail receiver registration screen.
3	Alarm setting	Alarm option setting screen.

11.2.1 Sender Settings

Sender setting	
* Automatic reports should only be used as an aid to ma	intenance planning.
Name	* Name
Email address	* Email Address
Password	* Password
Smtp host 🛛	smtp.gmail.com
Port	587
SUBMIT	

You can enter the name, email address, password, Smtp host, port number and press the [SUBMIT] button to save. We recommend using Google Gmail for email.

Smtp host 😧	smtp.gmail.com
Port	587

You can hover over the question mark next to the Smtp host for additional instructions.

11.2.2 Receiver Settings

cumali.ozel@artesis.com (Cumali OZ	ZEL)			
		Name	* Name	
		Email address	* Email Address	
	.	ADD		

If you register the name and e-mail address, the automatic report mail set for the e-mail will be sent. Fill in the contents and press the [ADD] button to register the recipient. Registered recipients are shown in the left email list.

Name	* Name
Email address	* Email Address
ADD	

If you tap a specific receiver in the email list, the Modify / Delete button appears. After modifying the contents, press [MODIFY] button to modify, and press [DELETE] to delete the receiver.

11.2.3 Alarm Settings

Alarm setting	
* Selected alarr	n prameters and update history are included in auto report e-mail.
Parameters	ℤ Examine1
	✓ Examine2
	☑ Watch Line
	☑ Watch Load
* E-mail include	es alarms and update information that occurred in 24 hours.
Weekdays	🗹 Monday
	🗷 Tuesday
	☑ Wednesday
	Thursday
	✓ Friday
	✓ Saturday
	🗷 Sunday
Time	9:00 • Send report hourly.
Option	Send e-mail only when alarm occured
	Send masked data.
	SUBMIT

- > If you check an alarm item, report is sent only for checked item.
- > If you check the day of the week, the report will be sent only on the checked day.
- If you specify a sending time, the report is sent at the specified time. The default setting is nine o'clock. If you check [Send report hourly], the report will be sent every time an alarm occurs, not a specific time.
- The Send option selects whether to send a report every specified day regardless of whether an alarm occur or only when an alarm occurs, if it is checked, an e-mail will not be sent if the alarm selected in the alarm item does not occur.

11.3 Account Settings

Account setting		* Passwords must be at least 8 cha	aracters long and must contain alphabetic, numeric, and special character combinations,
ID	Artesis_AS		
Current admin password	Enter your current password		
New admin password	Enter the new password	Repeat admin password	Repeat the new password
Change option	Change admin password		
Current guest password	Enter current guest password		
New guest password	Enter new guest password	Repeat guest password	Enter repeat guest password
Change option	Change guest password		
	MODIFY INFO		
Company logo			
Update your company logo			
Company name	Artesis_AS		
Company logo	Choose File No file chosen		
	UPDATE LOGO		

No	Section	Description
1	Account settings	Password of account setting screen.
2	Company Logo	Company logo registration screen

11.3.1 Account Settings

Account setting		* Passwords must be at least 8 characters long and must contain alphabetic, numeric, and special character combinations.		
ID	Artesis_AS			
Current admin password	Enter your current password			
New admin password	Enter the new password	Repeat admin password	Repeat the new password	
Change option	Change admin password			
Current guest password	Enter current guest password			
New guest password	Enter new guest password	Repeat guest password	Enter repeat guest password	
Change option	Change guest password			
	MODIFY INFO			

- You can change your password. The password must be at least eight characters long and must contain a combination of alphabetic, numeric and special characters. If the condition is not met, a message is displayed in red.
- The current administrator password is required to change the password. To change the guest password, you must enter an additional guest password.
- You must choose which account's password you want to change. By checking each change, you can change the password for the administrator, change the guest password, or both.

11.3.2 Company Logo

Update your company logo		
Company name	Artesis_AS	
Company logo	Choose File No file chosen	
	LIPDATE LOGO	

Register the logo on the top right of the site.

This extensions can not be uploaded. Only png file or jpg file can buploaded!		
	ОК	

Note: Logo file can only be *.png or *.jpg file extension. If you try to register other extension files, you will see this warning.

