

Omara OM-A6 Environment Monitoring System

Enquiry 1 @ Small setup network room:

Requirement:

1. Standalone device with monitoring input point for:
 - a. Temperature / humidity sensor
 - b. DI – fire alarm panel common alarm
 - c. DI – A/C changeover board common alarm (NO/NC)
 - d. DI – Electrical distribution board common alarm (NO/NC)
 - e. DI – UPS common alarm x 2 nos. (NO/NC)
 - f. DI – Water Leak System x 1 no.
2. SMS Alarm alert.

3. New Monitoring Point (Requirement)

Point	System / Equipment	Description	Input Sensor type	Input type
1.	Room temp/humidity	Omara Temp/Hum Server Room	Temp/hum sensor	
2.	Fire System	Fire Alarm Panel	Common alarm	NO/NC
3.	Electrical System	Air-con Changeover Board	Common alarm	NO/NC
4.	Electrical System	Electrical Main DB	Common alarm	NO/NC
5.	UPS System	UPS no.1	UPS Common alarm	NO/NC or RS485
6.	UPS System	UPS no.2	UPS Common alarm	NO/NC or RS485
7.	Water Leak System	Omara WDS System	Common alarm	NO/NC or RS 485

Enquiry 2 @ Westport Malaysia

Requirement:

1. Electrical system – RS485
2. A/C System (Precision cooling system x 3 units + FCU unit x 2 units)
3. Electrical supply for port tower x (qty to be justify further by coming week site visit)
4. Alarm alert: SMS and email
5. Web-enable solution

** proposed to replace existing GE Monitoring system (attached some related photo for your reference for time being.)

Existing Monitoring System @ Westport Data Center

System: GE Environmental Monitoring System

(1) Monitoring Point from existng GE System

Point	System / Equipment	Description	Input Sensor type	Input type
1.	Cooling System	Precision cooling unit no.1	via cooling system controller	RS 485
2.	Cooling System	Precision cooling unit no.2		RS 485
3.	Cooling System	Precision cooling unit no.3		RS 485
4.	Electrical System	AC-SB-1	Via power metering EPM 5500P	RS 485
5.	Electrical System	AC-SB-2		RS 485
6.	Electrical System	PDU-1		RS 485
7.	Electrical System	PDU-2		RS 485
8.	UPS System	UPS-1	Via UPS system controller	RS 485
9.	UPS System	UPS-2		RS 485
10.	Room temp/humidity	Temp/Hum Server Room 1	Temp/hum sensor	
11.	Room temp/humidity	Temp/Hum Server Room 2	Temp/hum sensor	
12.	Room temp/humidity	Temp/Hum Network Room	Temp/hum sensor	
13.	Room temp/humidity	Temp/Hum Staging /Console Room	Temp/hum sensor	
14.	Room temp/humidity	Temp/Hum M&E Room	Temp/hum sensor	
15.	Smoke Detection System	HSSD-1	HSSD controller	NO/NC
16.	Smoke Detection System	HSSD-2	HSSD controller	NO/NC
17.	Smoke Detection System	HSSD-3	HSSD controller	NO/NC
18.	Water Leak Detection System	TTK-FG-SYS	WDS controller	NO/NC or RS485
19.	Fire Protection System	Fire Panel Common Alarm	Fire control panel	NO/NC
20.	Fire Protection System	1 st Fire Alarm	Fire control panel	NO/NC
21.	Fire Protection System	2 nd Fire Alarm	Fire control panel	NO/NC

22.	Electrical System	PCU-LV-4	Via power metering EPM 5500P	RS-485
23.	UPS System	UPS-3 LV-4	Via UPS system controller	RS 485
24.	Room temp/humidity	Level 4 Room	Temp/hum sensor	
25.	Room Temperature / Electrical Board / UPS System	Comm Tower CT 1-1	Temp sensor	
26.			Electrical Power Fail	
27.			UPS Alarm	
28.	Room Temperature / Electrical Board / UPS System	Comm Tower CT 1-2	Temp sensor	
29.			Electrical Power Fail	
30.			UPS Alarm	
31.	Room Temperature / Electrical Board / UPS System	Comm Tower CT 2-1	Temp sensor	
32.			Electrical Power Fail	
33.			UPS Alarm	
34.	Room Temperature / Electrical Board / UPS System	Comm Tower CT 2-2	Temp sensor	
35.			Electrical Power Fail	
36.			UPS Alarm	
37.	Room Temperature / Electrical Board / UPS System	Comm Tower CT 3-1	Temp sensor	
38.			Electrical Power Fail	
39.			UPS Alarm	
40.	Room Temperature / Electrical Board / UPS System	Comm Tower CT 3-2	Temp sensor	
41.			Electrical Power Fail	
42.			UPS Alarm	
43.	Room Temperature / Electrical Board / UPS System	Comm Tower CT 4-1	Temp sensor	
44.			Electrical Power Fail	
45.			UPS Alarm	
46.	Room Temperature / Electrical Board / UPS System	Comm Tower CT 4-2	Temp sensor	
47.			Electrical Power Fail	
48.			UPS Alarm	
49.	Room Temperature / Electrical Board / UPS System	Comm Tower CT 4-3	Temp sensor	
50.			Electrical Power Fail	
51.			UPS Alarm	
52.		Comm Tower CT 5-1	Temp sensor	

53.	Room Temperature / Electrical Board / UPS System		Electrical Power Fail	
54.			UPS Alarm	
55.	Room Temperature / Electrical Board / UPS System	Comm Tower CT 5-2	Temp sensor	
56.			Electrical Power Fail	
57.			UPS Alarm	
58.	Room Temperature / Electrical Board / UPS System	Comm Tower CT 6-1	Temp sensor	
59.			Electrical Power Fail	
60.			UPS Alarm	
61.	Room Temperature / Electrical Board / UPS System	Comm Tower CT 6-2	Temp sensor	
62.			Electrical Power Fail	
63.			UPS Alarm	
64.	Room Temperature / Electrical Board	Comm Tower TB-1	Temp sensor	
65.			Electrical Power Fail	
66.	Room Temperature / Electrical Board	Comm Tower TB-2	Temp sensor	
67.			Electrical Power Fail	
68.	Room Temperature / Electrical Board / UPS System	Comm Tower CT 7-1	Temp sensor	
69.			Electrical Power Fail	
70.			UPS Alarm	
71.	Room Temperature / Electrical Board / UPS System	Comm Tower CT 7-2	Temp sensor	
72.			Electrical Power Fail	
73.			UPS Alarm	
74.	Room Temperature / Electrical Board / UPS System	Comm Tower CT 8-1	Temp sensor	
75.			Electrical Power Fail	
76.			UPS Alarm	
77.	Room Temperature / Electrical Board / UPS System	Comm Tower CT 8-2	Temp sensor	

78.			Electrical Power Fail	
79.			UPS Alarm	
80.	Room Temperature / Electrical Board / UPS System	Comm Tower CT 9-1	Temp sensor	
81.			Electrical Power Fail	
82.			UPS Alarm	
83.	Room Temperature / Electrical Board / UPS System	Comm Tower CT 9-2	Temp sensor	
84.			Electrical Power Fail	
85.			UPS Alarm	

(2) Additional Monitoring Point (to be add to new Omara System)

Point	System / Equipment	Description	Input Sensor type	Input type
1.	UPS battery bank	Individual battery monitoring	Battery Monitoring system	

** Existing UPS battery monitoring system used B-Tech (USA) product.

** UPS Battery Bank details

(A) 2 nos. of GE 200kVA UPS: 12V 200Ah SLA battery @ 32 nos. x 2 bank

(B) 1 no of GE 60kVA UPS: 12V 100Ah SLA battery @ 32 nos.

Attachement:



Photo 1& 2: EPM 5500P Power Metering System, generate RS 485 input for AC-SB 1 and AC-SB 2.



Photo 3& 4: User existing UPS battery monitoring system (Brand: BTECH SCM-600)

Data Centre Monitoring System



PEC-1

19.5 °C
47.9 %

FAN ON

PEC-2

19.7 °C
50.7 %

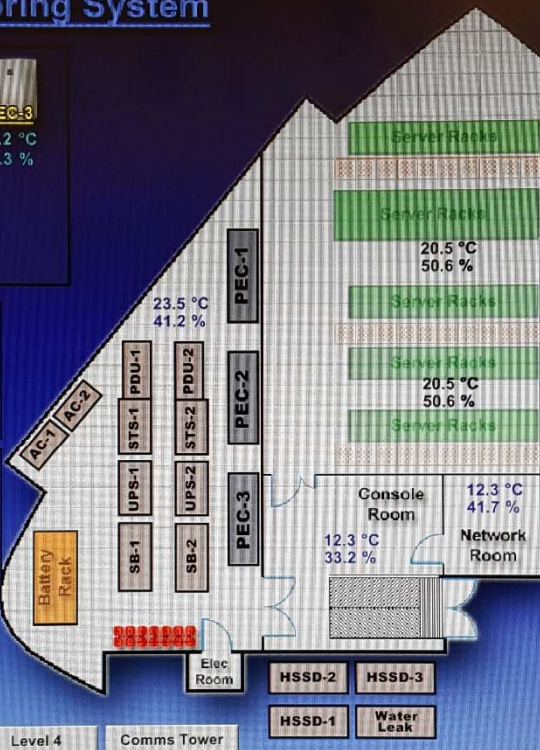
FAN ON

PEC-3

13.2 °C
63.3 %

ACSB-1	L1	L2	L3
Voltage (V) :	241.8	0.0	242.9
Current (A) :	36.48	36.4	37.12
Power :	6400	0	6560
P. Factor :	0.72	1	0.73

ACSB-2	L1	L2	L3
Voltage (V) :	238.9	239.5	240.0
Current (A) :	66.64	66.48	67.36
Power :	14640	14800	14960
P. Factor :	0.92	0.93	0.93



PDU-1	L1	L2	L3
Voltage (V) :	244.5	244.8	244.7
Current (A) :	38.75	48.15	38.35
Power :	8850	11150	8750
P. Factor :	0.94	0.95	0.93

PDU-2	L1	L2	L3
Voltage (V) :	244.4	244.8	244.1
Current (A) :	29.5	37.4	35.05
Power :	6700	8700	8050
P. Factor :	0.93	0.95	0.94

UPS-1

V-L1: 240.0
V-L2: 240.0
V-L3: 239.0
Freq: 49.9

V-L1: 415.0
V-L2: 416.0
V-L3: 416.0

Load-L1: 14.0%
Load-L2: 15.0%
Load-L3: 14.0%

UPS-2

V-L1: 238.0
V-L2: 240.0
V-L3: 238.0
Freq: 50.0

V-L1: 414.0
V-L2: 415.0
V-L3: 414.0

Load-L1: 11.0%
Load-L2: 12.0%
Load-L3: 12.0%

Exit
Main
Level 4
Comms Tower
HSSD-1
HSSD-2
HSSD-3
Water Leak
Alarm

Date	Time	Project Name	Ack	Alarm ID	State	Message
Jan 30	11:29	WESTPORTS	N	DB_CONN_DOWN	ALARM	The process CV4d8 has lost its database connection to SQL Server Native Client 1
Jan 25	23:45	WESTPORTS	N	PEC_3ALM_AIRFLOW	NORMAL	PEC_3 - Air Flow Alarm PEC_3ALM_AIRFLOW
Jan 19	11:36	WESTPORTS	N	EASVIO-CT4-2UPS_GEN	NORMAL	CT 4-2 - UPS General Alarm
Jan 19	10:49	WESTPORTS	N	EASVIO-CT4-1UPS_GEN	NORMAL	CT 4-1 - UPS General Alarm
Jan 19	10:03	WESTPORTS	N	EASVIO-CT4-1PWRFAIL	NORMAL	CT4-1 Power Failure Alarm
Jan 19	08:53	WESTPORTS	N	EASVIO-CT4-2COM_ERR	NORMAL	CT4-2 Communication Error Alarm
Jan 19	08:44	WESTPORTS	N	EASVIO-CT4-2PWRFAIL	NORMAL	CT4-2 Power Failure Alarm

26 Jan 30 11:29

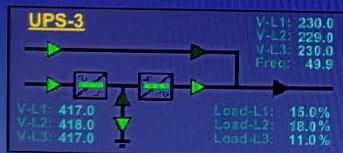
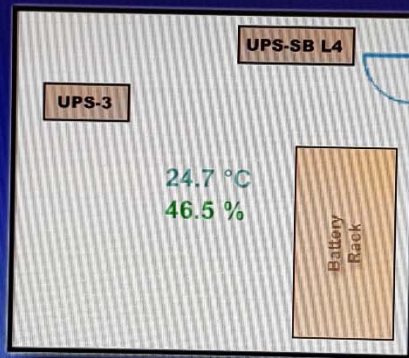
Existing GE Monitoring System: Page 1 view

Data Centre Monitoring System



Level 4

PDU-LVL4	L1	L2	L3
Voltage (V) :	241.9	242.2	242.6
Current (A) :	23.95	23.45	23.83
Power :	3216	3168	3264
P. Factor :	0.56	0.56	0.56



Exit Main Back Comms Tower

Alarm

Date	Time	Project Name	Ack	Alarm ID	State	Message
Jan 30	11:29	WESTPORTS	N	DB_CONN_DOWN	ALARM	The process CV4db has lost its database connection to SQL Server Native Client1
Jan 25	23:45	WESTPORTS	N	PEC_3ALM_AIRFLOW	NORMAL	PEC_3-Air Flow Alarm PEC_3ALM_AIRFLOW
Jan 19	11:36	WESTPORTS	N	EASYIO-CT4-2 UPS_	NORMAL	CT4-2 - UPS General Alarm
Jan 19	10:49	WESTPORTS	N	EASYIO-CT4-1 UPS_	NORMAL	CT4-1 - UPS General Alarm
Jan 19	10:03	WESTPORTS	N	EASYIO-CT4-1 PWR_	NORMAL	CT4-1 Power Failure Alarm
Jan 19	08:53	WESTPORTS	N	EASYIO-CT4-2 COM_	NORMAL	CT4-2 Communication Error Alarm
Jan 19	08:44	WESTPORTS	N	EASYIO-CT4-2 PWR_	NORMAL	CT4-2 Power Failure Alarm

26 Jan 30 11:29

Existing GE Monitoring System: Page 2 view

Data Centre Monitoring System



CT1-1 33.1 °C Temperature ● Power Fail ● UPS Alarm	CT1-2 30.8 °C Temperature ● Power Fail ● UPS Alarm	CT4-1 28.9 °C Temperature ● Power Fail ● UPS Alarm	CT4-2 32.7 °C Temperature ● Power Fail ● UPS Alarm
CT2-1 24.3 °C Temperature ● Power Fail ● UPS Alarm	CT2-2 28.9 °C Temperature ● Power Fail ● UPS Alarm	CT4-3 00.0 °C Temperature ● Power Fail ● UPS Alarm	CT5-1 32.9 °C Temperature ● Power Fail ● UPS Alarm
CT3-1 24.5 °C Temperature ● Power Fail ● UPS Alarm	CT3-2 34.0 °C Temperature ● Power Fail ● UPS Alarm	CT5-2 00.0 °C Temperature ● Power Fail ● UPS Alarm	CT6-1 33.4 °C Temperature ● Power Fail ● UPS Alarm
TB-1 36.5 °C Temperature ● Power Fail	TB-2 00.0 °C Temperature ● Power Fail	CT6-2 33.6 °C Temperature ● Power Fail ● UPS Alarm	

Exit Main Level 4 Back

CT7 Alarm

Date	Time	Project Name	Ack	Alarm ID	State	Message
Jan 30	11:30	WESTPORTS	N	DB_CONN_DOWN	ALARM	The process CV408 has lost its database connection to SQL Server Native Client 1
Jan 25	23:45	WESTPORTS	N	PEC_3_ALM_ARFLOW	NORMAL	PEC 3 - Air Flow Alarm PEC_3_ALM_ARFLOW
Jan 19	11:36	WESTPORTS	N	EASYIO-CT4-2/UPS_GEN	NORMAL	CT 4-2 - UPS General Alarm
Jan 19	10:49	WESTPORTS	N	EASYIO-CT4-1/UPS_GEN	NORMAL	CT 4-1 - UPS General Alarm
Jan 19	10:03	WESTPORTS	N	EASYIO-CT4-1/PWRFAIL	NORMAL	CT 4-1 Power Failure Alarm
Jan 19	08:53	WESTPORTS	N	EASYIO-CT4-2/COM_ERR	NORMAL	CT 4-2 Communication Error Alarm
Jan 19	08:44	WESTPORTS	N	EASYIO-CT4-2/PWRFAIL	NORMAL	CT 4-2 Power Failure Alarm

Existing GE Monitoring System: Page 3 view

Data Centre Monitoring System



CT7-1
35.5 °C Temperature
● Power Fail
● UPS Alarm

CT7-2
29.1 °C Temperature
● Power Fail
● UPS Alarm

CT 8-1
30.6 °C Temperature
● Power Fail
● UPS Alarm

CT8-2
29.2 °C Temperature
● Power Fail
● UPS Alarm

CT 9-1
29.6 °C Temperature
● Power Fail
● UPS Alarm

CT9-2
29.9 °C Temperature
● Power Fail
● UPS Alarm

CT1-6

Exit Main Level 4 Back

Alarm

Date	Time	Project Name	Ack	Alarm ID	State	Message
Jan 30	11:30	WESTPORTS	N	DB_CONN_DOWN	ALARM	The process C:\Wd8 has lost its database connection to SQL Server Native Client 1
Jan 25	23:45	WESTPORTS	N	PEC_3_ALM_AIRFLOW	NORMAL	PEC_3 - Air Flow Alarm PEC_3_ALM_AIRFLOW
Jan 19	11:36	WESTPORTS	N	EASYIO-CT4-2UPS_GEN	NORMAL	CT 4-2 - UPS General Alarm
Jan 19	10:49	WESTPORTS	N	EASYIO-CT4-1UPS_GEN	NORMAL	CT 4-1 - UPS General Alarm
Jan 19	10:03	WESTPORTS	N	EASYIO-CT4-1PWRFAIL	NORMAL	CT4-1 Power Failure Alarm
Jan 19	08:53	WESTPORTS	N	EASYIO-CT4-2COM_ERR	NORMAL	CT4-2 Communication Error Alarm
Jan 19	08:44	WESTPORTS	N	EASYIO-CT4-2PWRFAIL	NORMAL	CT4-2 Power Failure Alarm

Existing GE Monitoring System: Page 4 view

Data Centre Monitoring System



Date	Time	Project Name	Ack	Alarm ID	State	Message
Jan 30	11:30	WESTPORTS	N	DB_CONN_DOWN	ALARM	The process CV4d8 has lost its database connection to SQL Server Native Client 1
Jan 25	23:45	WESTPORTS	N	PEC_3.ALM_AIRFLOW	NORMAL	PEC_3 - Air Flow Alarm PEC_3.ALM_AIRFLOW
Jan 19	11:36	WESTPORTS	N	EASYIO-CT4-2.UPS...	NORMAL	CT 4-2 - UPS General Alarm
Jan 19	10:49	WESTPORTS	N	EASYIO-CT4-1.UPS...	NORMAL	CT 4-1 - UPS General Alarm
Jan 19	10:03	WESTPORTS	N	EASYIO-CT4-1.PWRF...	NORMAL	CT4-1 Power Failure Alarm
Jan 19	08:53	WESTPORTS	N	EASYIO-CT4-2.COM...	NORMAL	CT4-2 Communication Error Alarm
Jan 19	08:44	WESTPORTS	N	EASYIO-CT4-2.PWRF...	NORMAL	CT4-2 Power Failure Alarm
Jan 15	01:20	WESTPORTS	N	EASYIO-CT5-2.COM...	ALARM	CT5-2 Communication Error Alarm
Jan 09	12:37	WESTPORTS	N	EASYIO-CT4-3.COM...	ALARM	CT4-3 Communication Error Alarm
Jan 09	11:25	WESTPORTS	N	PEC_1.ALM_HIPRES2	NORMAL	PEC_1 System 2 High Pressure Alarm PEC_1.ALM_HIPRES2
Jan 09	11:24	WESTPORTS	N	PEC_2.ALM_RMPRES	NORMAL	PEC_2 - Room Pressure Probe Fault Or Disconnected Alarm PEC_2.ALM_RMPRES
Jan 09	11:24	WESTPORTS	N	PEC_2.ALM_HIHUMID	NORMAL	PEC_2 - Humidity High Alarm PEC_2.ALM_HIHUMID
Jan 09	11:24	WESTPORTS	N	PEC_2.ALM_SUPPAIR	NORMAL	PEC_2 - Supply Air Probe Fault or Disconnected Alarm PEC_2.ALM_SUPPAIR
Jan 09	11:23	WESTPORTS	N	PEC_2.ALM_HIPRES2	NORMAL	PEC_2 System 2 High Pressure Alarm PEC_2.ALM_HIPRES2
Jan 09	11:23	WESTPORTS	N	PEC_2.ALM_HIRMT...	NORMAL	PEC_2 - Room Temperature High Alarm PEC_2.ALM_HIRMT...
Jan 09	09:04	WESTPORTS	N	EASYIO-1.TEMP1	NORMAL	M&E Room Temperature
Jan 09	08:19	WESTPORTS	N	EASYIO-2.TEMP4	NORMAL	Server Room Front Temperature
Jan 09	08:05	WESTPORTS	N	EASYIO-2.TEMP5	NORMAL	Server Room Back Temperature
Jan 08	12:03	WESTPORTS	N	EASYIO-CT4-3.UPS...	NORMAL	CT 4-3 - UPS General Alarm
Jan 08	11:40	WESTPORTS	N	EASYIO-CT4-3.TEMP1	NORMAL	CT4-3 High Temp Alarm
Jan 07	17:27	WESTPORTS	N	EASYIO-TB-1.TEMP1	NORMAL	TB-1 High Temp Alarm
Jan 07	17:23	WESTPORTS	N	EASYIO-CT7-1.TEMP1	NORMAL	CT7-1 High Temp Alarm
Jan 03	17:42	WESTPORTS	N	EASYIO-TB-2.COM...	ALARM	TB-2 Communication Error Alarm
Jan 03	17:37	WESTPORTS	N	EASYIO-CT6-2.UPS...	ALARM	CT 6-2 - UPS General Alarm
Jan 03	17:36	WESTPORTS	N	DB_START_FORWA...	NORMAL	The process MAC_PTDL has begun to forward data to SQL Server Native Client 10.0.
Jan 03	17:36	WESTPORTS	N	DB_START_FORWA...	NORMAL	The process MAC_DL has begun to forward data to SQL Server Native Client 10.0.

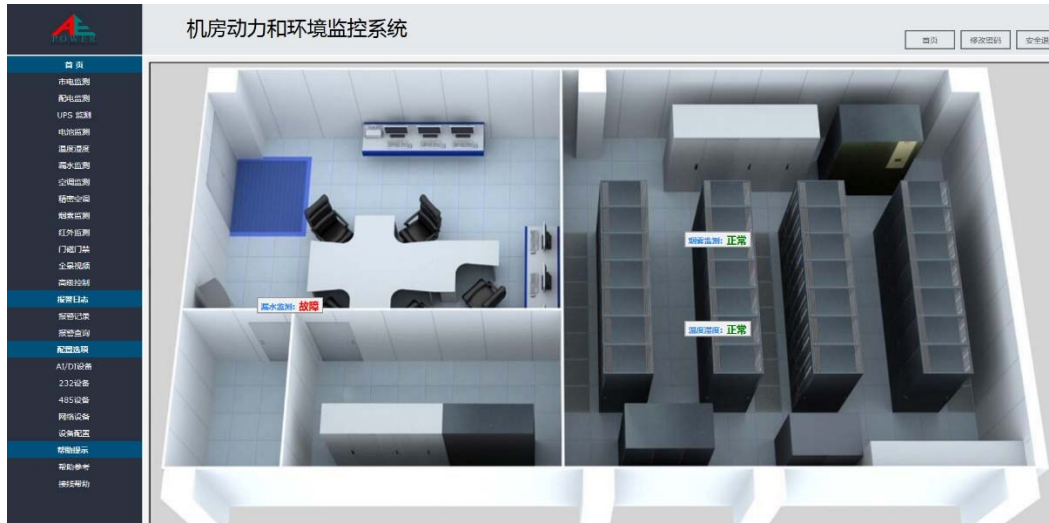
26 Jan 30 11:30 Toggle Ack View Stack Comments On View Screen

- Exit
- Main
- Back
- Comms Tower
- SMS Test
- Alarm History

Existing GE Monitoring System: Page 5 view

Question / requirement from Omara Monitoring System:

1. On the main page, how many layout plan can we insert into the system?



Can Omara monitoring system generate more than 1 layout plan?

2. New EMS system to support:
 - a. Web-enable
 - b. SMS system alert notification
 - c. Email system alert notification
 - d. History log (downloadable to record purposes)
3. How can Omara monitoring system integrate with door access system (can share for further details). What is the door access system specification / requirement to integrate with Omara EMS system?
4. Customer expectation: New monitoring system should be better specification and more reliable compare to exiting system.
5. Omara monitoring system interface language need to be in ENGLISH.