



TRANSWATER
Engineers of Integrated Solutions

AUTOMATED WATER QUALITY MONITORING SYSTEM (AWQMS)



AWQMS Provides

Real-time water quality data of key water quality parameters:
Early warning system

1

2

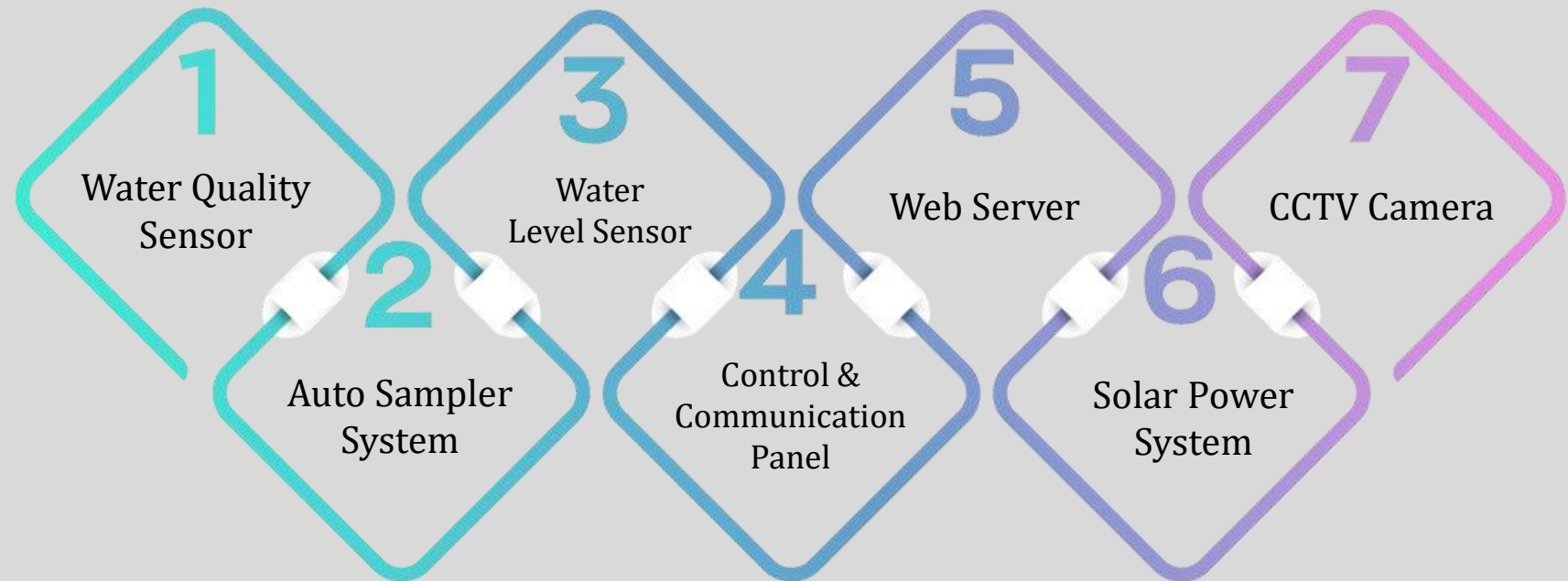
Automatic sampling of water at the affected station upon the trigger of alert

Water quality database at network → better understanding of water quality characteristics of drainage/river system

3



AWQMS Key Components



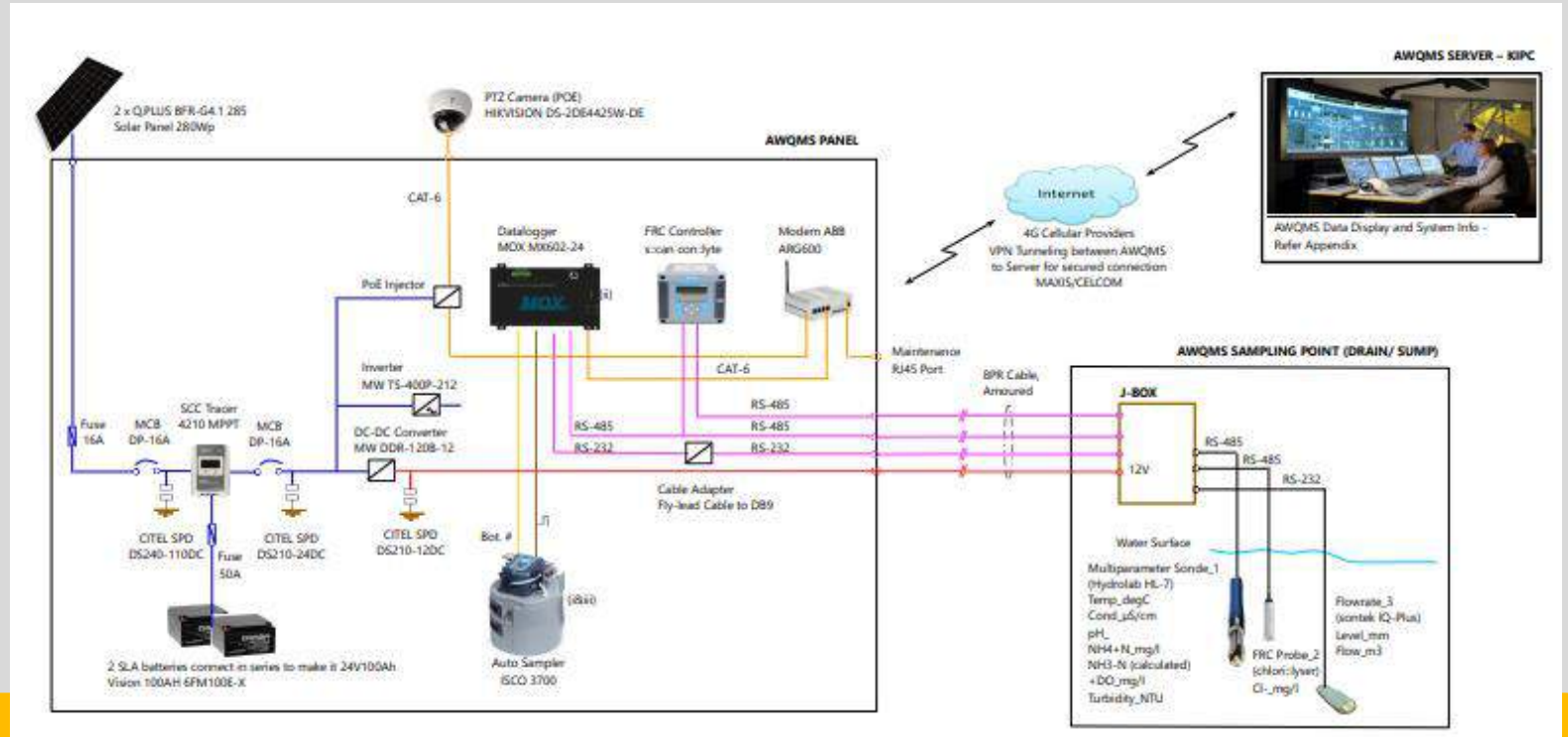
AWQMS Architecture

Single Line Architecture –

AWQMS for

- Water Quality
- Water Level
- Water Flow

CCTV Camera & Auto Sampler System



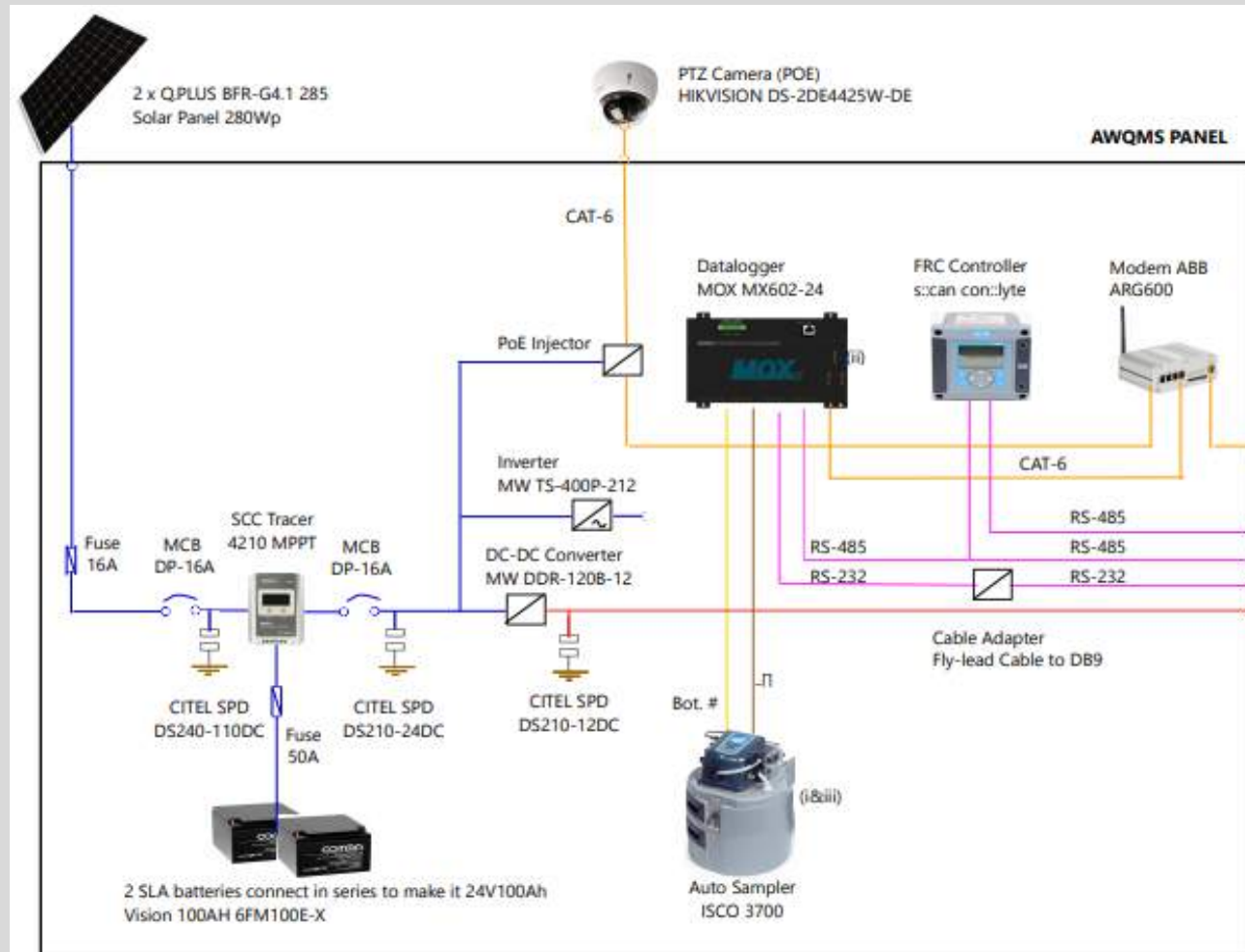
Remarks:

- The water sampler can be overridden to trigger wireless from AWQMS Server
- The datalogger triggers the water sampler by condition alarm (user can input pre-set limits)
- The water sampler sends a Bottle # (ID) to data logger upon pre-set condition trigger or manual override



AWQMS Architecture

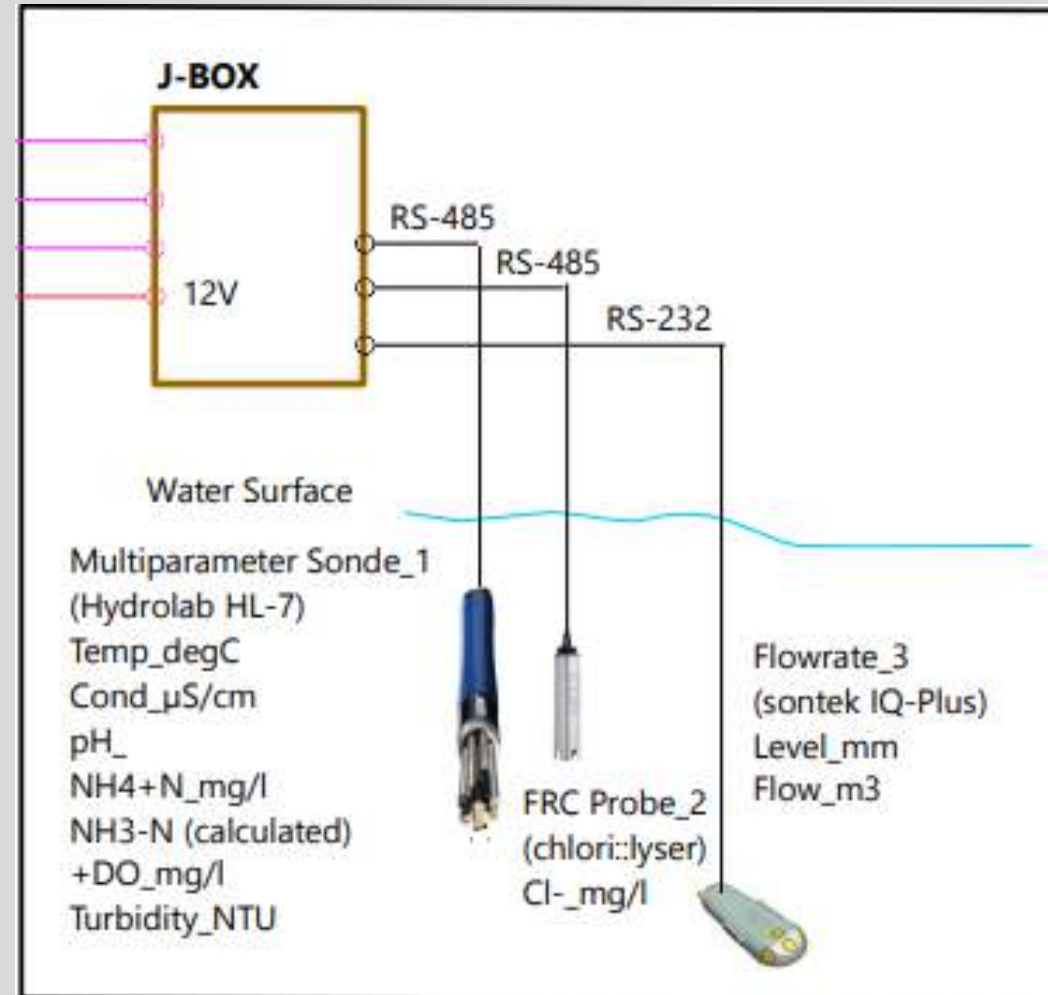
Panel





AWQMS Architecture

Sampling Point





TRANSWATER
ENVIRONMENTAL SERVICES
Smart Solution Through Integration

AWQMS Web Server

Real-time Data





AWQMS Web Server

- Trigger Alert Red & Yellow Alert
- Raw Data
- Treated Data
- QAQC

PETRONAS | Automated Water Quality Monitoring System

Map Data Report Log Admin Profile Logout

Station Alerts	
PCLA1	▼
PCLA2	▼
IPASB1	▼
UK1	▼
UK2	▼
PCLA3	▼
PCD2	▼
PCD1	▼
PCD3	▼
PCD4	▼
PCLA4	▼

Alert Status Panel:

- 11 OK (Green)
- 0 Yellow Alert (Yellow)
- 0 Red Alert (Red)
- 0 Maintenance (Blue)
- 0 Comm Failed (Purple)



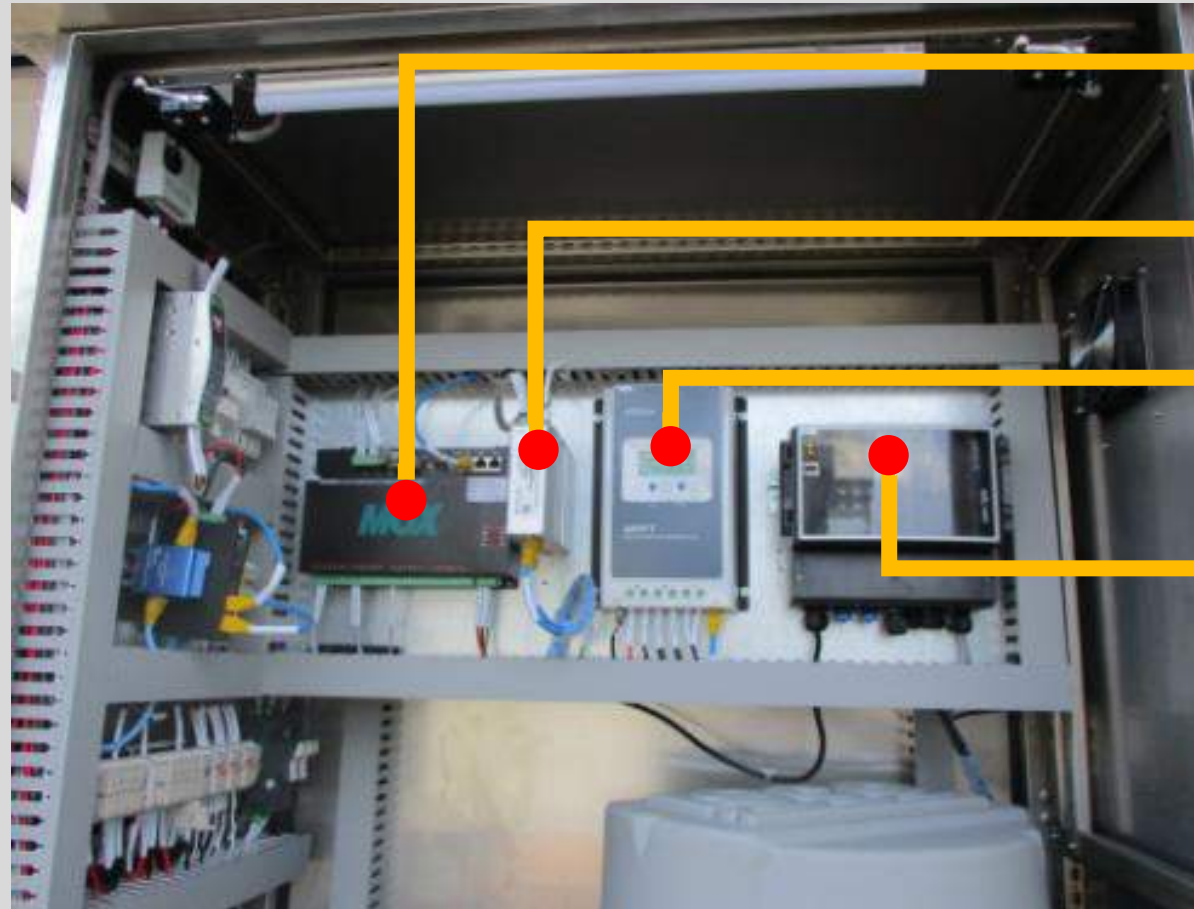
AWQMS Enclosure



- Dimension : 1000mm x 2000mm x 600mm
- Material : Stainless Steel
- Solar Panel x 2 units - Q-cell solar panel



AWQMS System



MOX Data Logger

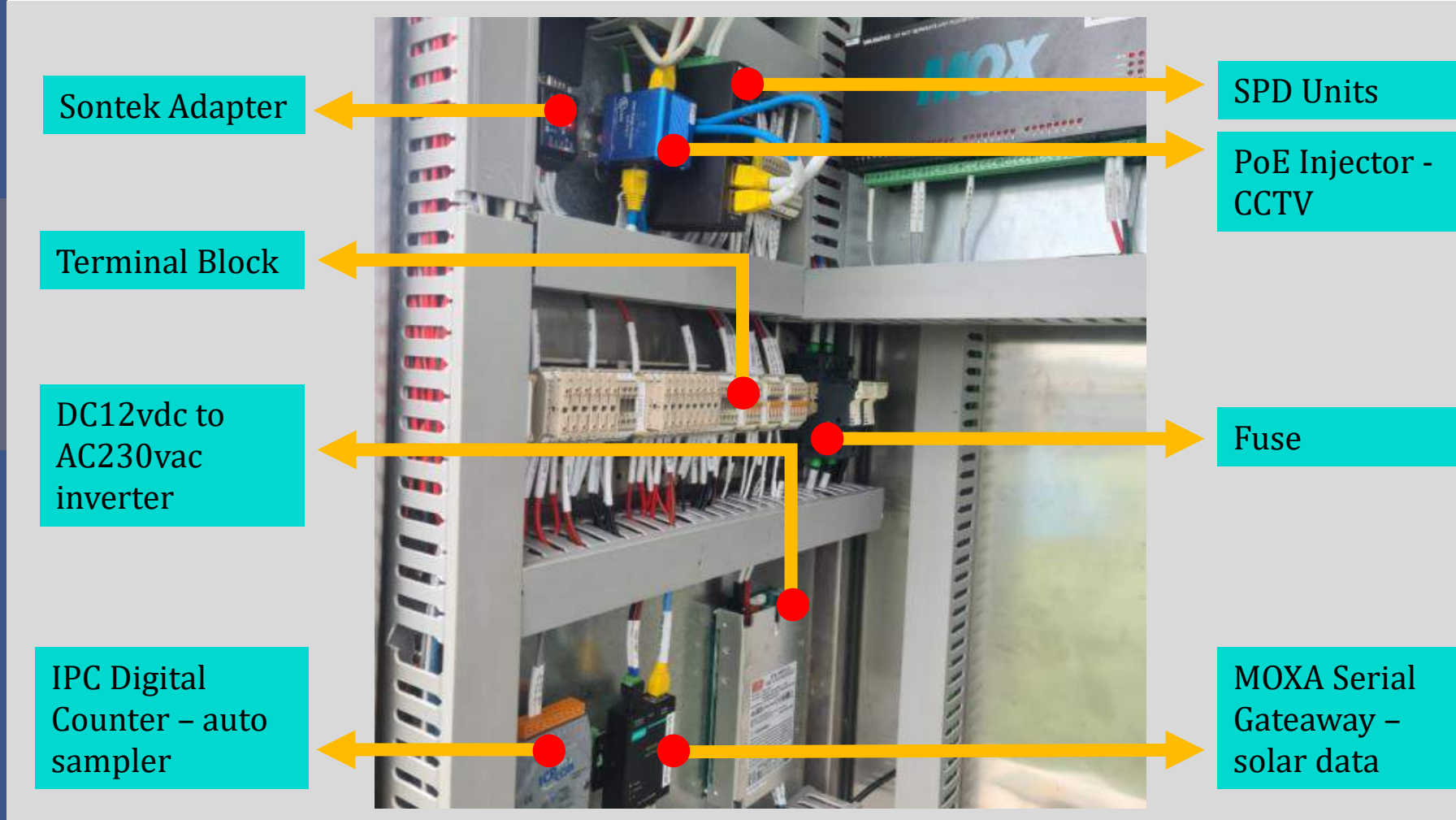
Modem

Solar Charger
Controller

FR Chlorine
Terminal

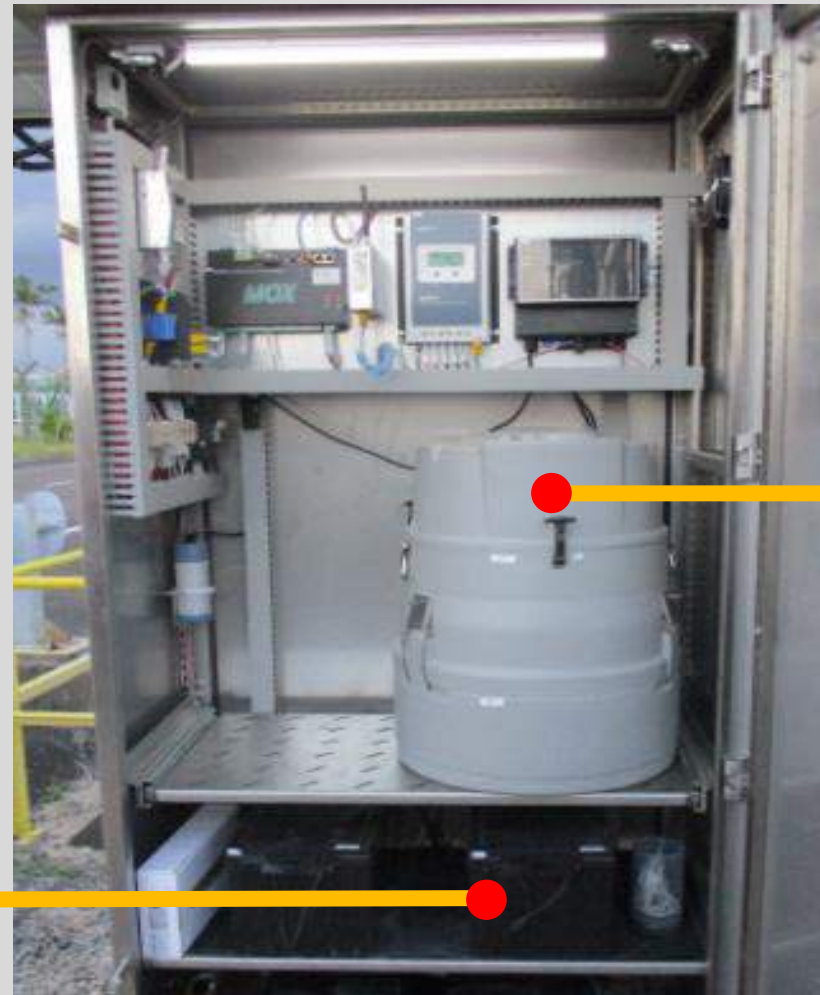


AWQMS System





AWQMS System

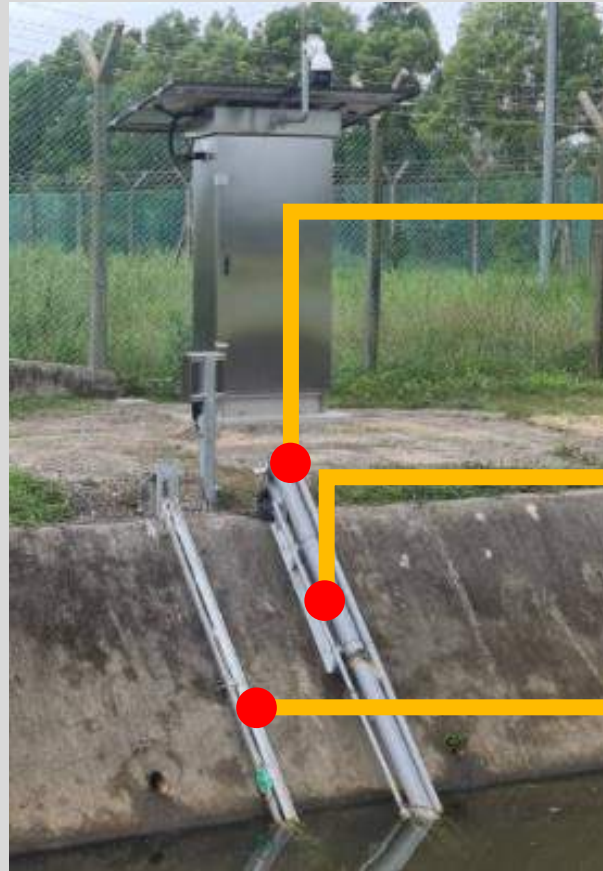


Auto Sampler –
24 bottles x 1L

- Battery 200 AH x 4 units
- Battery remaining 30% - 40% after battery discharge test for 7 days



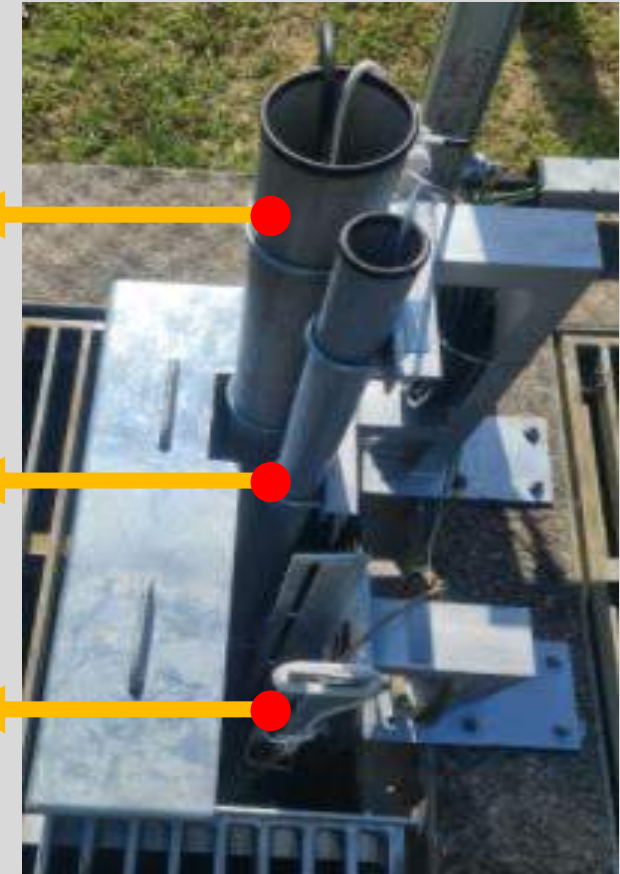
AWQMS Sensor Development



Multiparameter
Sonde- HL7

Scan chlorimeter-
FR Chlorine

Sontek_Depth &
Flow sensor





AWQMS CCTV

1



Front Panel Mounted

2



Back Panel Mounted

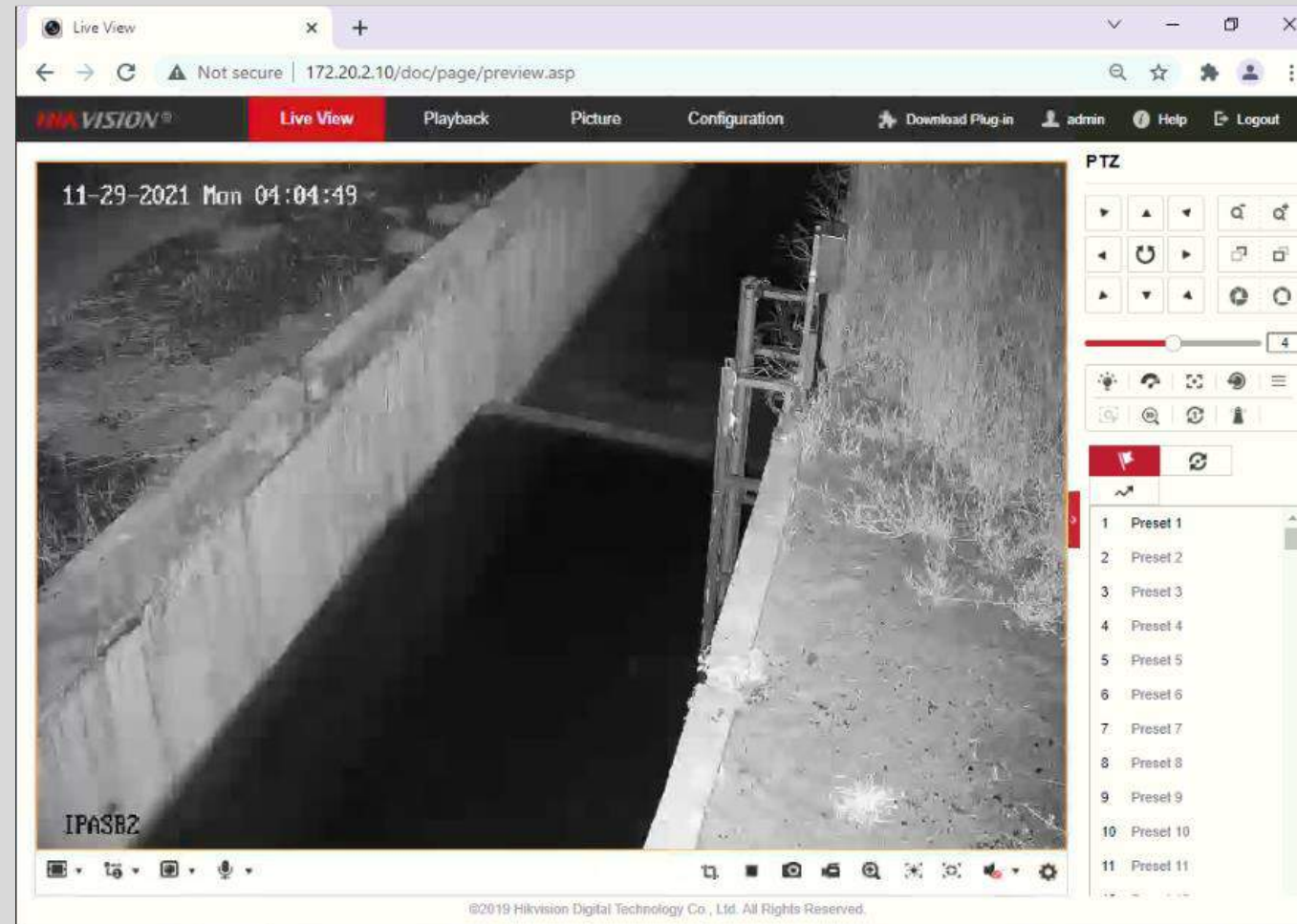
3



Pole Mounted



AWQMS CCTV



- ✓ Pan
- ✓ Tilt
- ✓ Zoom
- ✗ Motion Detection



TRANSWATER
ENVIRONMENTAL SERVICES
Smart Solution Through Integration

TRANSWATER Environmental Services Sdn. Bhd.

25, Jalan Pengacara U1/48,
Temasya Industrial Park,
Seksyen U1, 40150 Shah Alam,
Selangor Darul Ehsan, Malaysia.



+603 5569 0364



www.twenviro.com.my

THANK YOU