

MONITORING GTCEP

Supervision of 3200 V / 5500 V substations
Product leaflet

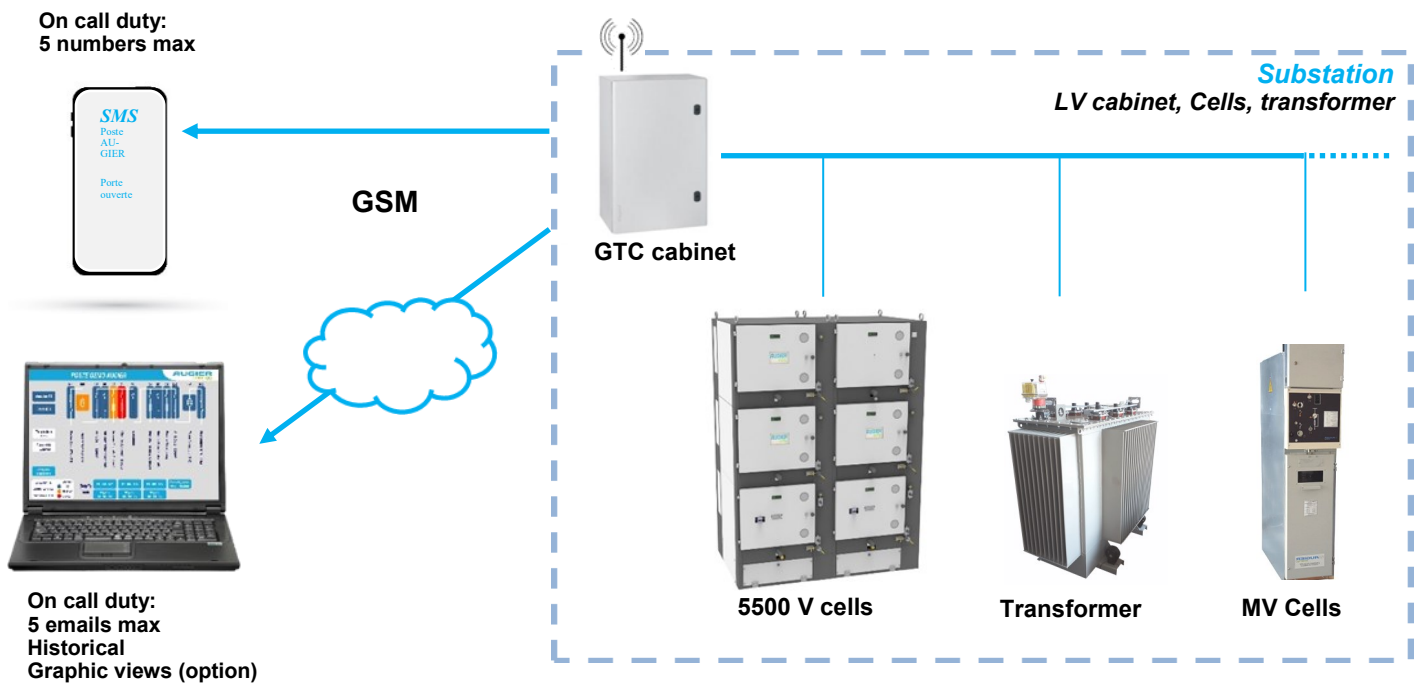
- ✓ Secure the substation
- ✓ Ensure continuity of service
- ✓ Follow the events
- ✓ Easy maintenance
- ✓ Be connected
- ✓ Save energy

AUGIER Monitoring system for substation has been designed to ensure the maintainability of the 3200 V / 5500 V (HTI) substations and securing transformer stations.

AUGIER GTCEP system keep an eye on substations equipment such as 5500 V cells, power transformers and MV cells.

The monitoring of the substation makes it possible to secure the substation and to be informed of any intrusion or the beginning of a fire.

Monitoring with SMS & email



When any fault appears, our industrial remote gateway sends a SMS notification to one or many recipients. The SMS will mention the concerned substation, active faults and alarms.

AUGIER ensures a personalized development of the GTCEP system for each substation.

AUGIER ensures also the delivery, the commissioning and the training of the concerned staff.

The installer should check the availability of supervised information. Connection to the supervised equipment and the GSM subscription is not the responsibility of AUGIER.

Materials

All monitoring equipment that provide a feedback from the installation will be installed in a wall cabinet or integrated in the power low voltage cabinet. These equipment should be installed in the substation that has to be managed. The cabinet will include :

- One intelligent module which contains :
 - One communication card to dialog with 3200V/5500V cells
 - One GSM 4G communication card to send SMS & E-mail
 - Digital inputs
- A rescued 230 V / 24 V power supply
- A smoke detector
- A thermal probe
- A door contact
- A GSM antenna including a 15 meter long extension cable



The following materials have to be connected to the GTCEP system :

- MV Cells
- 3200 V / 5500 V cells (RS485 JBUS or Ethernet)
- Substation equipment (digital inputs)
- Power supply (230V)

Accessories supplied separately, to be connected by the customer



Smoke detector



Thermal probe



Contact door

Monitored points

<i>Monitoring equipment</i>		<i>Monitored points*</i>
Substation		Substation door open Fire alarm No voltage 48 Vcc Exceeding substation temperature
MV Cells (15 kV, 20 kV..)		Absence of MV voltage Switch (circuit breaker) open Fuse fusion defect (circuit breaker)
Transformers		Alarm protection Fault protection
MV Cells (3200 V, 5500 V)	Incomer switch	Communication fault Absence of MV voltage MV fuse fusion fault Unhooked position of the carriage
	Coupler switch	Unhooked position of the carriage
	Feeder contactor	Communication fault Fault lighting control Contactor fault Lack pressure SF6 fault, if available Fuse fusion fault Over current and homopolar fault MV network isolation alarm or fault
LV cabinet		Presence of voltage 230 V 24 V battery fault

Sending an SMS and an email about an event.

A rescued 24 V source guarantees the proper feedback of information when the station is no longer supplied.

On request any other information may be supervised within the controller's capacity.

* Subject to availability of information

Energy saving function:

Accessible from an HMI page,
Possibility, for each departure, to set a lighting extinction period.

POSTE DEMO AUGIER		AUGIER energy		
Heure de l'automate 15 : 53	Plages horaires d'EXTINCTION quotidienne			
	Noms des départs	Etat	DEBUT	FIN
<p>Mode d'emploi</p> <p>Si besoin, vous pouvez changer l'heure du poste, directement en cliquant sur les minutes (OK pour valider) ; puis, en cliquant sur les heures (OK pour valider).</p> <p>Entrer le nom des départs en cliquant dessus, ces noms seront repris dans les messages d'alertes des SMS et des emails.</p> <p>Activer les horaires d'extinction, en cliquant sur le carré blanc.</p> <p>Modifier si besoin les horaires en cliquant sur les heures (OK), puis sur les minutes (OK).</p> <p>Vous pouvez a tous moments désactiver l'extinction quotidienne en cliquant sur le carré vert, l'éclairage restera allumé la nuit.</p> <p>Retour vue Principale <small>V 1.0</small></p>	rue delafontaine st denis	<input checked="" type="checkbox"/> Activé	23 : 35	02 : 45
	Avenue Romain Rolland	<input type="checkbox"/> Désactivé		
	Chemin du moulin Basset	<input checked="" type="checkbox"/> Activé	00 : 10	02 : 25
	Rue de Strasbourg	<input type="checkbox"/> Désactivé		

Personnel management function:

Accessible from an IHM page,
Ability to change the name, telephone number and email address of on-call personnel.

POSTE DEMO AUGIER		AUGIER energy	
<p>Mode d'emploi</p> <p>Si besoin, vous pouvez modifier les destinataires, directement en cliquant sur le numéro ou email "Emplacement libre" et cliquer sur OK pour valider.</p> <p>Le nombre de destinataire SMS est limité à 5 numéros.</p> <p>Le nombre de destinataire EMAIL est limité à 5 emails.</p> <p>Les prochaines alarmes ou défauts seront envoyés a cette liste.</p> <p>Pour effectuer un test d'envois, vous pouvez cliquer sur le bouton TEST ALARME.</p> <p>TEST ALARME</p> <p>Retour vue Principale</p> <th colspan="3">Liste des destinataires pour les alarmes</th>	Liste des destinataires pour les alarmes		
	Astreintes SMS		
	+33612823802		
	+33621212121		
	Emplacement numéro libre		
	Emplacement numéro libre		
	Emplacement numéro libre		
	Astreintes EMAIL		
	home@augier.com		
	m.elbabili@augier.com		
Emplacement email libre			
Emplacement email libre			
Emplacement email libre			

Access from any laptop



or smartphone



Monitoring with graphical views

Graphical views and remote access :

In addition to sending SMS or e-mail, development of views and provision of the necessary tools (access WEB, Login and password) to access the views of the medium voltage station. Access to the views can be done from any computer, tablet or phone connected to the internet.

Developed graphical views:

- A general view of the substation
- One view per incoming MV/HTI
- One view per block of three cells
- A view of the substation & LV cabinet

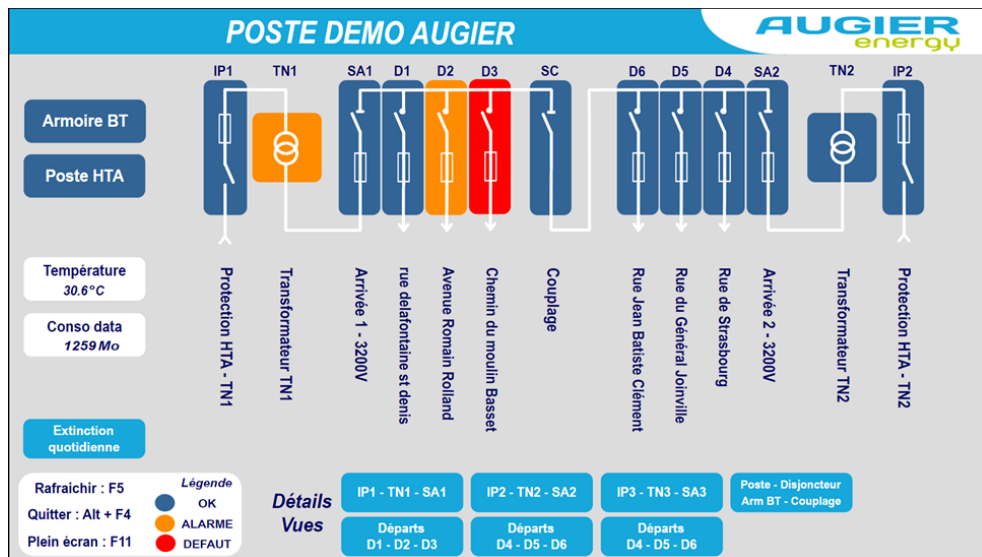
Additional information monitored with graphical views:

For feeders contactor :

- Position of the contactor,
- Value of line currents,
- Voltage value,
- Network isolation monitoring,
- Energy consumed,
- Operating time.

For incoming switch :

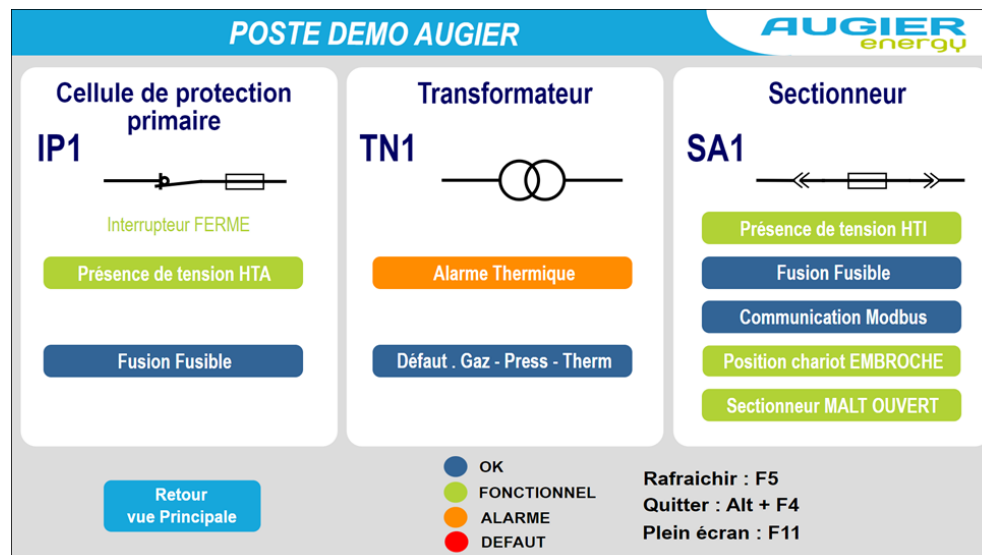
- Position of the earth switch



General view of the substation:

This view allows you to monitor all the elements of the transformer station, it gives access to all the detailed views.

Animated view, it reflects the real malfunctions of the MV and HTI cells.




Detailed view:

Visualization of the status of the MV protection cells, the transformer and the HTI general protection cell.

POSTE DEMO AUGIER **AUGIER**
energy

rue delafontaine st denis

D1



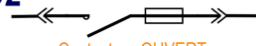
Contacteur FERME

Gaz SF6	Fusible	Alarme DFT
I Terre	Auto	Com. bus
I Phase	Allumage	Contacteur

U ₁₂	5480V	I ₁	38A	DFT	0KΩ
U ₂₃	5487V	I ₂	37A	E	194MWh
U ₁₃	5483V	I ₃	39A	Tps	5248h

Avenue Romain Rolland

D2



Contacteur OUVERT

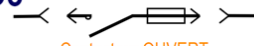
Gaz SF6	Fusible	Alarme DFT
I Terre	Manuel	Com. bus
I Phase	Allumage	Contacteur

U ₁₂	0V	I ₁	0A	DFT	3562KΩ
U ₂₃	0V	I ₂	0A	E	131MWh
U ₁₃	0V	I ₃	0A	Tps	4538h

Chemin du moulin Basset

D3

Chariot DEBROCHE



Contacteur OUVERT

Gaz SF6	Fusible	Défaut DFT
I Terre	Manuel	Com. bus
I Phase	Allumage	Contacteur

U ₁₂	0V	I ₁	0A	DFT	248KΩ
U ₂₃	0V	I ₂	0A	E	27521 kWh
U ₁₃	0V	I ₃	0A	Tps	416h

● OK
● FONCTIONNEL
● ALARME
● DEFALT

Rafraichir : F5
Quitter : Alt + F4
Plein écran : F11

Detailed view of the contactor departures:

- Animated view allowing the visualization of the status of each of the contactor departures with additional display of:
- The position of the contactor trolley,
- The position of the earthing switch,
- The network voltage,
- The intensity in real time,
- The level of network insulation,
- The energy consumed,
- The operating time

POSTE DEMO AUGIER **AUGIER**
energy

Armoire basse tension

Présence de tension 230V

Défaut batterie 24V

Poste HTA de transformation

Seuil température réglé à: 30 °C

Seuil température dépassé

Défaut climatisation

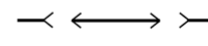
Porte du poste ouverte

Alarme incendie

Défaut bloc autonome 48V

Sectionneur couplage

SC



Position chariot DEBROCHE

● OK
● FONCTIONNEL
● ALARME
● DEFALT

Rafraichir : F5
Quitter : Alt + F4
Plein écran : F11

Detailed view:

Visualization of information concerning the safety of the transformer station, the LV cabinet and the HTI coupling device if applicable.

Detail view : Event log

Date	Tag	Status	Type	L	Description
11/02/2025 09:06:58	PORTE_OUVERTE	END		/	Porte du poste HTA ouverte
11/02/2025 09:03:45	PORTE_OUVERTE	ACK	LVL	/	Porte du poste HTA ouverte
11/02/2025 09:03:45	PORTE_OUVERTE	ALM	LVL	/	Porte du poste HTA ouverte
10/02/2025 21:32:17	PORTE_OUVERTE	END		/	Porte du poste HTA ouverte
10/02/2025 21:28:33	D01_DEF_allumage	END		/	D01 - Défaut allumage
10/02/2025 21:28:25	D01_DEF_fusible	END		/	D01 - Fusion fusible
10/02/2025 21:20:37	PORTE_OUVERTE	ACK	LVL	/	Porte du poste HTA ouverte
10/02/2025 21:20:37	PORTE_OUVERTE	ALM	LVL	/	Porte du poste HTA ouverte
10/02/2025 20:34:03	D01_DEF_allumage	ACK	LVL	/	D01 - Défaut allumage
10/02/2025 20:34:03	D01_DEF_allumage	ALM	LVL	/	D01 - Défaut allumage
10/02/2025 20:30:48	D01_DEF_fusible	ACK	LVL	/	D01 - Fusion fusible
10/02/2025 20:30:48	D01_DEF_fusible	ALM	LVL	/	D01 - Fusion fusible
07/02/2025 15:31:29	PORTE_OUVERTE	END		/	Porte du poste HTA ouverte
07/02/2025 15:29:15	PORTE_OUVERTE	ALM	LVL	/	Porte du poste HTA ouverte
07/02/2025 09:38:32	PORTE_OUVERTE	END		/	Porte du poste HTA ouverte
07/02/2025 09:29:15	PORTE_OUVERTE	ACK	LVL	/	Porte du poste HTA ouverte
07/02/2025 09:29:15	PORTE_OUVERTE	ALM	LVL	/	Porte du poste HTA ouverte
07/02/2025 09:29:10	PORTE_OUVERTE	END		/	Porte du poste HTA ouverte
07/02/2025 09:29:02	PORTE_OUVERTE	ACK	LVL	/	Porte du poste HTA ouverte
07/02/2025 09:29:02	PORTE_OUVERTE	ALM	LVL	/	Porte du poste HTA ouverte
07/02/2025 06:35:42	PORTE_OUVERTE	END		/	Porte du poste HTA ouverte
07/02/2025 06:30:00	PORTE_OUVERTE	ACK	LVL	/	Porte du poste HTA ouverte
07/02/2025 06:30:00	PORTE_OUVERTE	ALM	LVL	/	Porte du poste HTA ouverte
06/02/2025 10:13:26	D02_TCP_link	END		/	D02 - Défaut liaison série
06/02/2025 10:11:13	D02_TCP_link	ACK	HI	/	D02 - Défaut liaison série
06/02/2025 10:06:13	D02_TCP_link	ALM	HI	/	D02 - Défaut liaison série
05/02/2025 15:45:03	PORTE_OUVERTE	END		/	Porte du poste HTA ouverte

Retour vue Principale

Date : Date & Heure
Tag : Nom de l'alarme

Status : ACK = acquittement alarme et envois email & SMS
ALM = déclenchement alarme
END = fin de l'alarme retour à l'état normal

AUGIER HAS BEEN ISO 9001 CERTIFIED SINCE 1995



Dealer contact information:

A large empty rectangular box intended for dealer contact information.

