

Modular Telecom Shelter Solutions





About Hai Nam

Hai Nam is a specialist in design, manufacture & provides services of Electrical switchboards, Prefabricated Module, Outdoor Shelter & Automation.

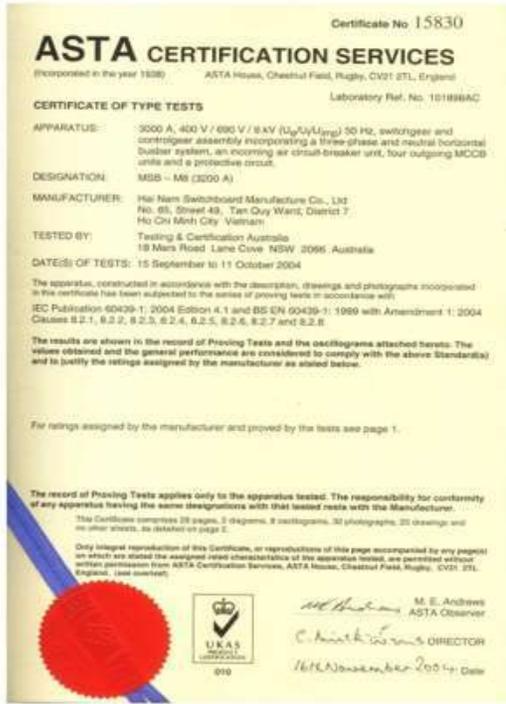
We found in 2002 in Southern HCMC, Vietnam, Hai Nam Switchboard Manufacturing Co., Ltd. now is located in 6,650 square meter facility with 03 lines of production machines. You, our clients are the life-blood of our Company and everything we do is directed toward exceeding your expectations. We promise to deliver on time, within budget and to specifications. Our engineer can give value engineering (VE) too.

We are a team of 200 people including 40 Engineers & Bachelor Holders. Many of whom have worked together for years. The success which the Company has achieved is based squarely on the body of knowledge, skill and expertise of its workforce.

Our quality is assured with Hai Nam's certification to SGS ISO 2001:2008. Moreover, we are the licensee of Blokset, a low voltage high dependability switchboard from Schneider Electric, & licensee of Simoprime, a medium voltage metal clad panels up to 24kV from Siemens. The world is coming flat now. We do not only export to regional country such as Laos, Cambodia, Myanmar but also in Japan, Australia, Russia, Bangladesh, Ukraine.

Hai Nam is justifiably proud of our products, and we strive to ensure that you have the solution you need. We are looking forward having a chance to work with you.

Hai Nam Certificate



Type Tests Certificate



ISO 9001:2015 Certificate

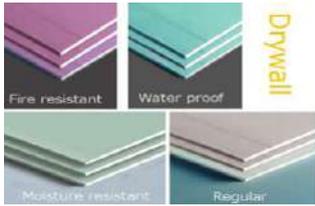


Outdoor Shelter – Single Module



Environmental

Protection class	IP55 (*IP65 on request)
Impact Protection	IK10 (*other standard on request)
Ambient Operating Temperature	-5oC - +45oC (standard ETSI EN 300-019-1-1/119-2-1)
Storage Temperature	-5oC - +60oC (standard ETSI EN 300-019-1-2/119-2-2)
Transportation Temperature	-5oC - +60oC (standard ETSI EN 300-019-1-3/119-2-3)
Ambient RH	0 -95% (none condensing)
Other factor	Win load up to 150km/hr – Sea Salts



Mechanical structure

Construction	Modular-Dual wall c/w inner insulation (Double GA/EG steel layer 1.2mm & 0.5mm) 19inch rail EIA standards.
Load	600kg.
Inner thermal insulation	XPS insulate – 25mm (0.028W/(m.K) @30kg/m3).
Surface	Powder coated $\geq 60\mu\text{m}$ RAL7035
Dimensions	39U -2010H x 850W x 650D (mm) ~155kg (not included equipment)
Locking	Mechanical lock theft proof lock 03- point (c/w key and protection cover)
Design life time	up to 20 years.

Electrical Distribution

Input CB	02 pcs/ MCB 63A 2P 6kA/ c/w mechanical interlock.
Output CB	01 MCB 10A 2P 6kA (* DC CB is separate - Rectifier Equipment)
Fire protection	Automatic EPO (Smoke & heat combination).
LED Power Indicator	Yes.
Auxiliary	01pcs LED Lamp 01pcs IP67 63A -230VAC 3PIN Socket 01 pcs DIN Rail single socket Universal 10A. 02 pcs grounding bar Fuse kit/wiring, cable management & accessories.

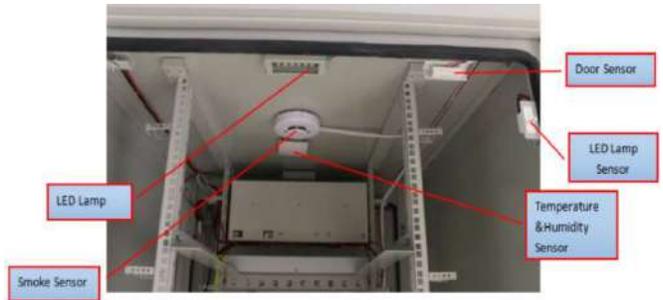
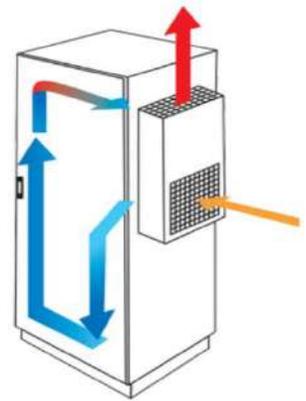
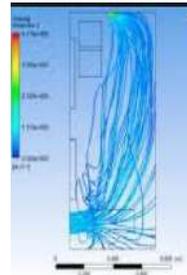
Standard	MCB/MCCB :	IEC 60898/IEC 60947-2
	Telecom grounding	QCVN9:2010/BTTTT
	Surge protection	IEC61643 class I and II QCVN 32-2011-BTTTT TCVN 8687-2011





Cabinet Thermal Control

- Primary Cooling 48V DC Tel Air Conditioning
Capacity range 300 - 4000Watt (on request)
- Backup Cooling 48 DC Ventilation Fan
Air flow 200 – 2500m3/hr (on request)
- Optional Heater/Heat Exchanger/EC Fan on request.



Environment sensor

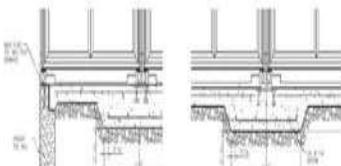
- Door Switch 01 set (Limiter Switch)
- Smoke Sensor 01 set (Photoelectric smoke detector c/w relay output)
- Air temperature 02 set (NTC wire sensor 0 -60oC
(c/w temperature controller, accuracy 0.1oC)
- Water leak/Flood sensor 01 set (Spot detector c/w Alarm relay board).

- Environment Monitoring Standard 16 DO (type Dry contact)
Optional 16DI/8DO – Modbus RTU RS485/Modbus TCP



Other option

Modifications according to customer's requests /customer's integration are possible



OTHER INTERGRATED SOLUTION

Solar & Wind turbine for BTS

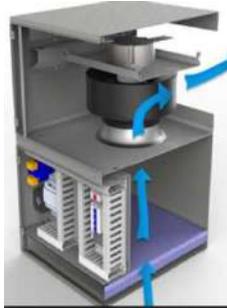


Telecom Rectifier & Battery

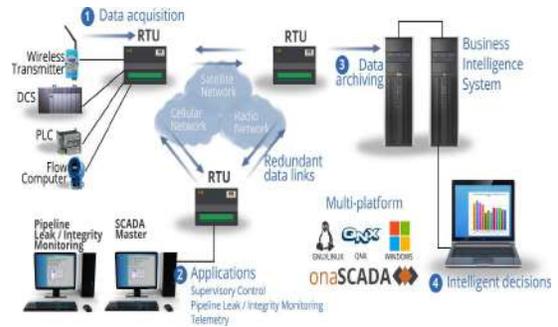


Cabinet Thermal Control

(Free Cooling/DC/AC Air Conditioning)



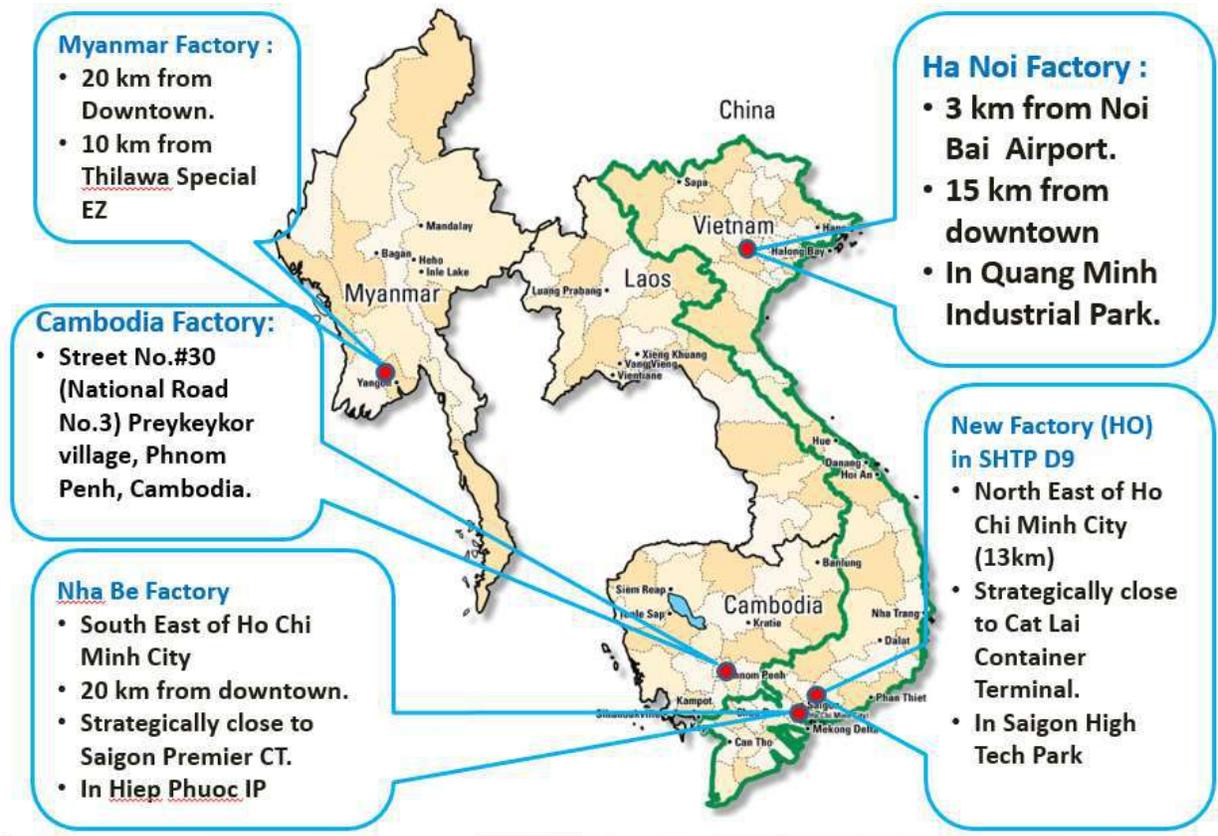
Control & Monitoring Device



Specific application: Stainless steel/Aluminum material, Low temperature/High corrosion ... application



HẢI NAM LOCATION



Contact us

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