

# MODULAR SUBSTATIONS

## Customised footprint design for switchroom, switchyard and transformer installations.

Ampcontrol's modular substations are a proven and viable alternative to building concrete, brick and mortar substations. The modular design suits applications such as zone and radial substations.

These modular substations are designed, manufactured, assembled, wired and operationally tested in our workshop before being shipped as a packaged system ready for assembly on site. This minimises site works and offers significant cost savings.

## Advantages over on site construction:

- Faster response to network augmentation requirements
- Greater flexibility in the network
- Labour demands on site minimised
- Can be easily relocated to another site or extended
- Minimal environmental impact and a low profile design

## Total turnkey projects:

- Project management
- Engineering design
- System integration via SCADA
- Installation, commissioning and maintenance
- Zone substation manufacture and installation

## Stage 1 - Factory assembly and testing

- Incoming high and low level busbar structures assembled
- Modular switchroom manufactured and fitted out
- Rotary isolators, CTs and VTs positioned onto modular switchroom
- Complete installation tested prior to disassembly and shipment

## Stage 2 - Civil works

- Concrete piers installed for switchroom/incomer modules
- Retaining walls constructed and site levelled
- Feeder cable conduits laid
- Earth grid installation
- Top surface completed
- Modular base structures for incoming supply installed

## Stage 3 - Equipment installation

- Transformer and cooling unit placed in position
- Modular switchroom positioned on piers
- Pre-assembled rotary isolators positioned onto switchroom overhead frame

## Stage 4 - Incoming switchgear and cabling installation

- Incoming equipment assembled onto base
- Factory manufactured individual overhead cables installed
- Earth grid tails connected to incoming modules
- Feeder cabling terminated
- Testing and commissioning



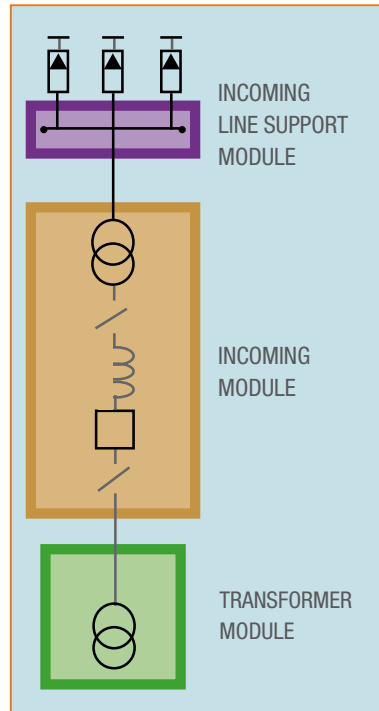
# MODULAR SUBSTATIONS

## Flexible design

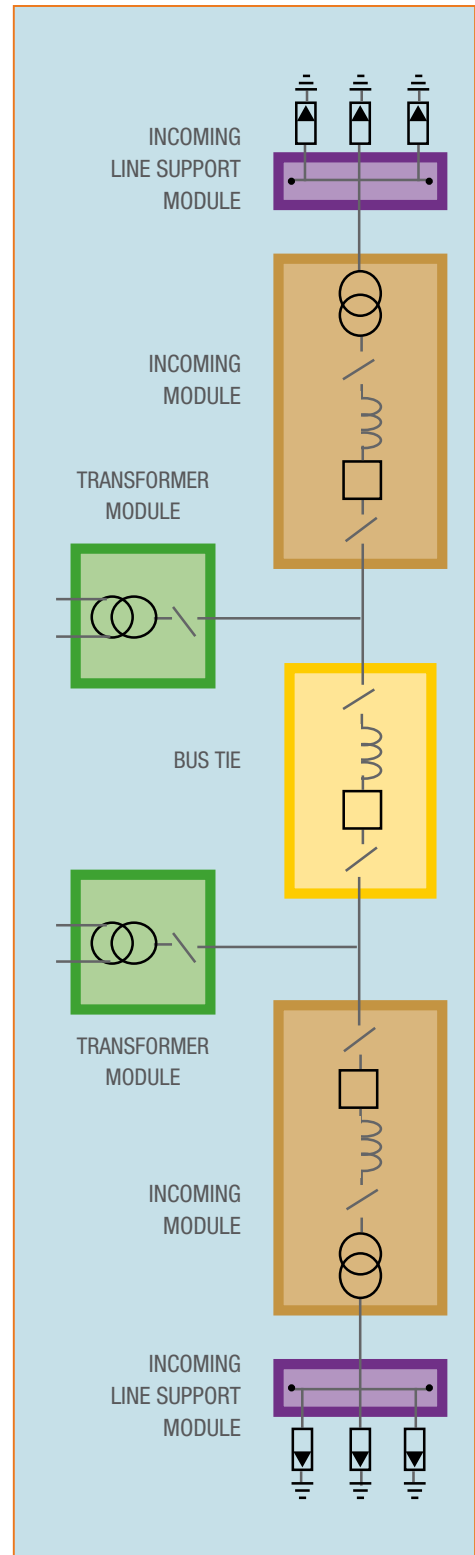
Utilisation of the modular design allows for additional units to be added as demand increases.

An initial single incomer/single transformer substation can be transformed into a multi-incomer, multi-transformer zone substation with bus tie circuit breakers, master slave tap changing, multi-feeders and audio frequency injection for load control at any time in the future.

## Single incomer, single transformer



## Multi-incomer, multi-transformer



## Multi-incomer, multi-transformer

