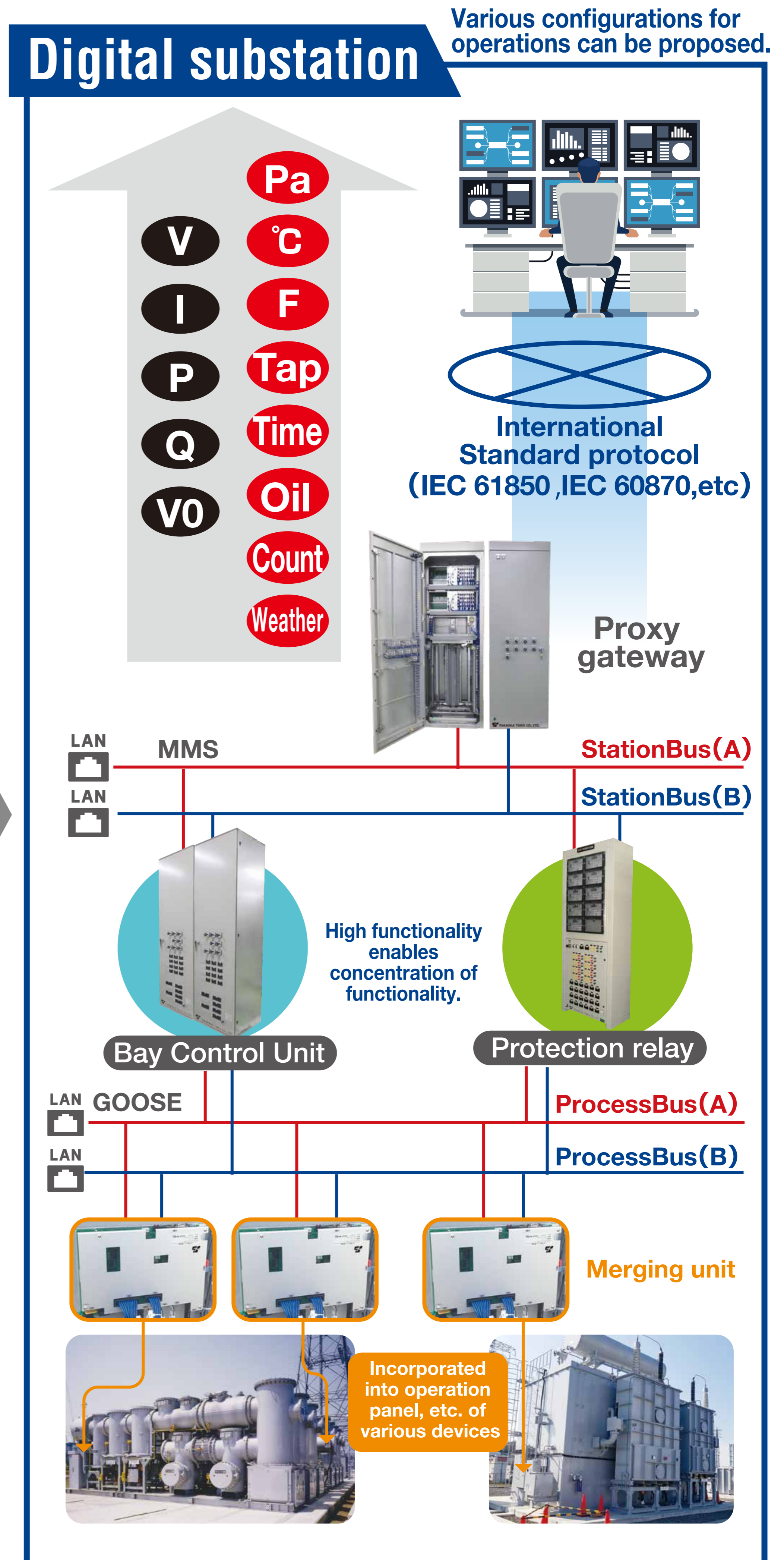
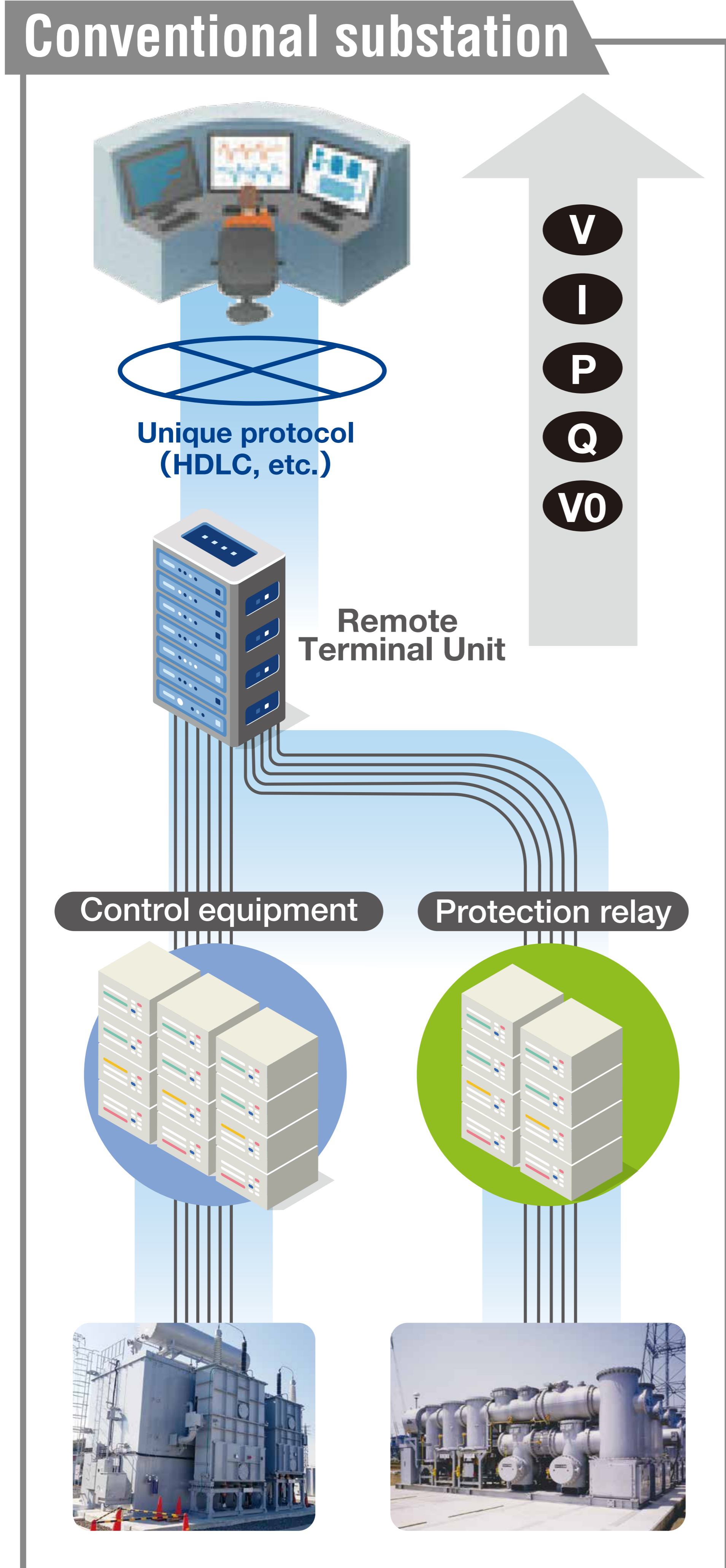


Digital Substation Proposed by Takaoka Toko

- ▶ Conforms to International Standard [IEC 61850]
- ▶ Copper cable connection → LAN connection enables “shortening the construction period,” “cost reduction,” and “increasing information.”

Monitoring Control Network



Digital Substation Proposed by Takaoka Toko

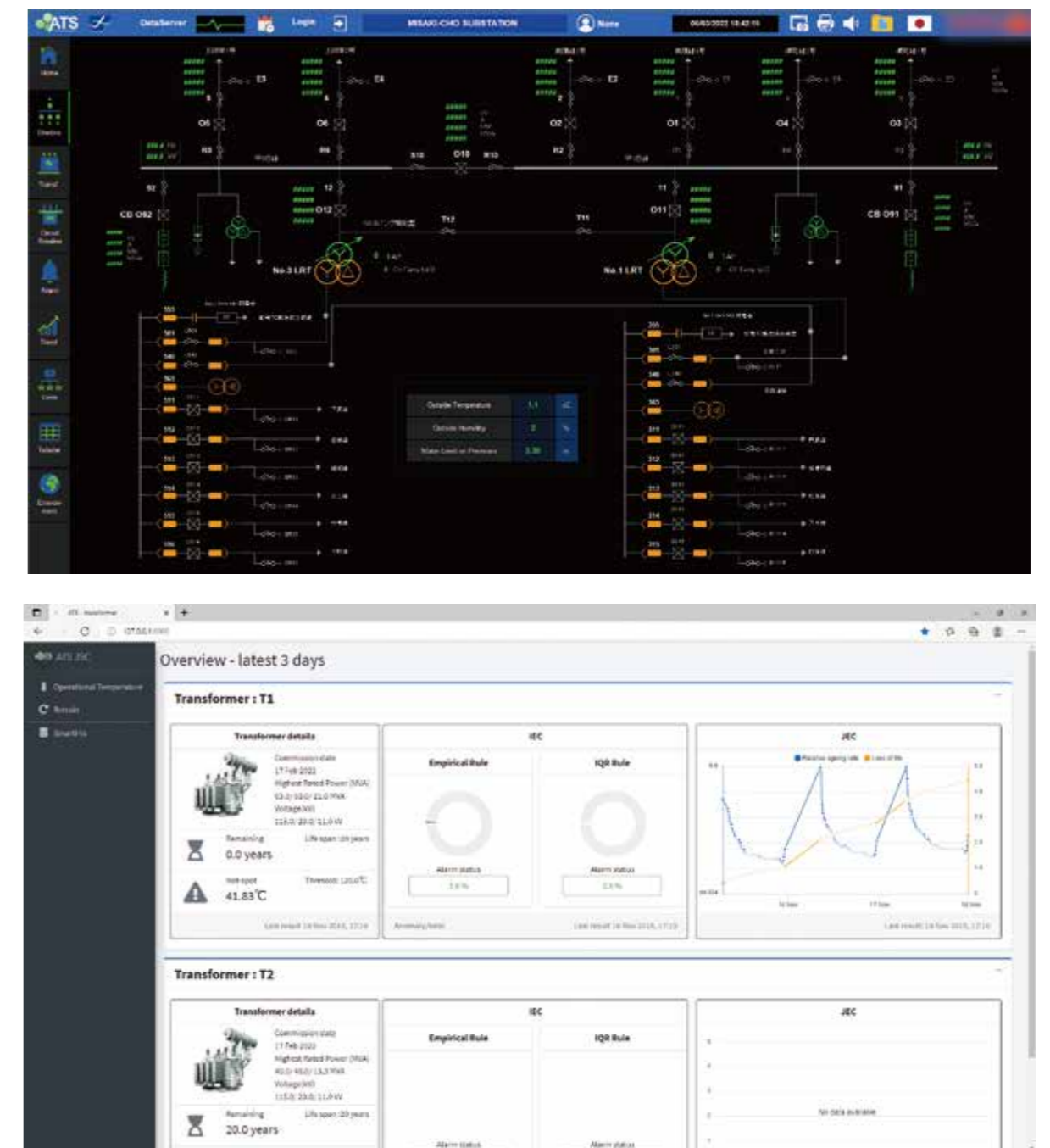
- ▶ Enables labor saving in patrol inspection and acquiring local data when an abnormality occurs.
- ▶ Enables managing the trend of acquired data and diagnosing and analyzing the status.
- ▶ Equipment can be incorporated into the conventional facilities as well as devices manufactured by other companies.
 - Highly compact and flexible mounting, AC/DC convertible, incorporated sensor power supply, etc.

Sensing

Feature

Monitoring equipment	Trend Function Acquisition Information	Diagnostic item
Transformer	Load current, tap value, etc.	Life expectancy calculation
	Tap Value, Secondary Voltage, Active/Reactive Power, %Z	Primary voltage calculation
	Background noise, surge	Partial discharge
Circuit breaker	Breaking current	Cumulative breaking current
	Spring stored energy current	Deterioration symptom diagnosis
Common to facilities	Water level measurement	Operational support before submersion

※Example of diagnosing and analyzing the status



System Architecture

