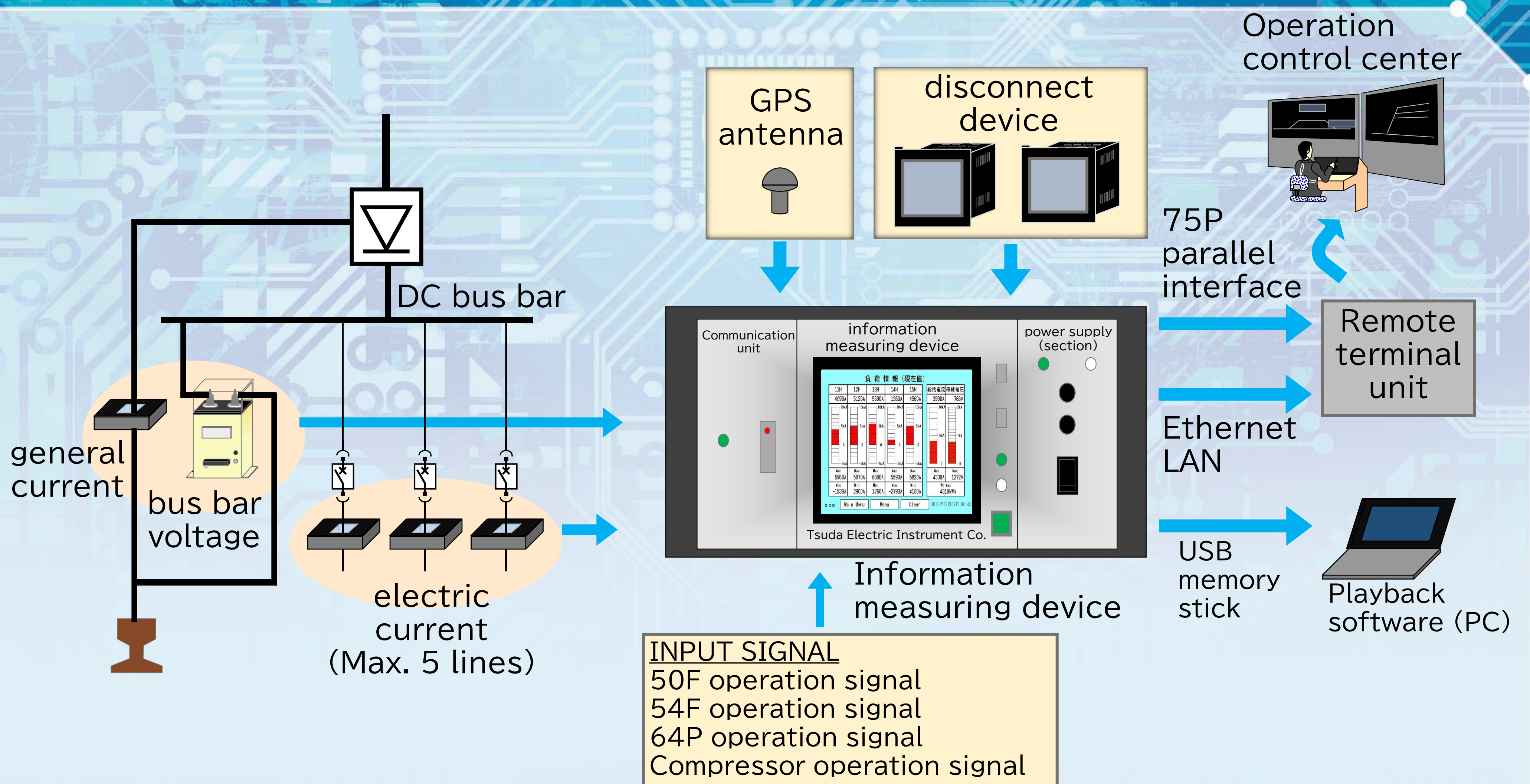


Information Measuring Equipment

This system measures and records the load information, fault information, and maintenance information of the feeder lines in the substations for DC electric railways. In case of short circuit or ground fault, the system is equipped with a fault locating function to locate the fault point. The measured information can be transmitted to the remote control unit for confirmation, and can also be transferred to a USB memory stick for confirmation, charting, drawing, and printing on a PC.



Purpose and role of the device

The information measurement equipment measures and records the load information, fault information, and maintenance information of feeder lines at DC substations. The system is also equipped with a fault point identification function that locates the fault point when a feeder line fault occurs.

This system uses a touch panel with an 8.4-inch color LCD screen for information display, which greatly improves the information display function on this system compared to previous models. In addition, the measured information can be transmitted to the remote control unit for confirmation, and can also be transferred to a USB memory for confirmation, tabulation, drawing, and printing on a PC.

Information display function

Current values can be displayed for all five feeder lines, the total current, and the bus bar voltage, and the load status of the substation can be checked on a single screen.

Through the load information report display function and load graph display function, you can check the recent status.

Fault waveforms and wear evaluation values of circuit breakers can be displayed.

The results of constant monitoring of the equipment can be checked on the screen, and even when an abnormality occurs, the location of the abnormality happened can be detected.

Duplication of power supply

Since the power supply for the device is designed to be duplicated, the measurement function of the device is maintained even if an error occurs in one of the power supplies.

When an abnormality occurs on one of the power supply for the equipment, the power supply abnormality indication output is shown and the indicator light of the equipment lights up.

Equipment Compatibility

Since the panel cutting dimensions are the same as those of conventional machines, it is easy to update the equipment.



Measurement and recording of information at substations

Measure and record substation load, fault, and maintenance information

High resolution of fault current measurement

10 times higher resolution of fault current measurement than conventional equipment (100A→10A)

Fault Point Locator

Capable of identifying fault points in DC feeder circuits

Color LCD touch panel

Color LCD touch panel for easy operation

Information Transmission to Remote Terminal Unit

Transmission of various types of recorded information to a remote terminal unit is possible.

Checking and Editing Recorded Information

Recorded information can be carried out by USB

Easy to check and edit recorded information by using playback software (PC software)

type	MDE-11L-E MDE-11L-P	MDE-12L-E MDE-12L-P
Number of lines	Bus line summary (load information): 1 line Power line (load/fault information): Max. 5 lines Conservation information (compressor) : 2 lines	
Information recording transfer function	Load and maintenance information: 3 months (current month and past 2 months) Fault information: Fault waveforms for 30 seconds, up to 10 times	
Failure information sampling	1ms	
Failure point determination	Error ±2.0% (for substation spacing of 5.0km to 15.0km) Error ±0.1km (for substation spacing less than 5.0km)	
Display function	TFT 8.4 inch touch panel display	
Transmission method	MDE-□-E : Ethernet LAN MDE-□-P : 75P parallel interface	
Device	integrated type	separate type
Control power supply	DC100V/110V (variation range DC80 to 132V)	
Dimensions/ Weight	H245mm x W600mm x D338mm About 20kg	
	<u>Measurement unit</u> H249mm x W341mm x D332.3mm Approx. 12kg <u>Power supply and communication section</u> H147mm x W341mm x D319.3mm Approx. 8.1kg	



MDE-11L-E

