

Job Name:
System Reference:

Date:

OVERVIEW

Trane®/Mitsubishi Electric offers LIC-Charge for all of its VRF equipment. The total electric energy used by a VRF system can be divided into the electric energy that is consumed by the outdoor and indoor units. The electric energy used by outdoor and indoor units can be further divided into the operating and standby electric energy.

With LIC-Charge, the respective amounts of the total electric energy can be apportioned based on the operating status and capacity of each tenant's indoor units.

LICENSES

- LIC-Charge Master
 - Master Controller license for TE-200A
- LIC-Charge Expansion
 - Expansion Controller license for TE-50A and TW-50A

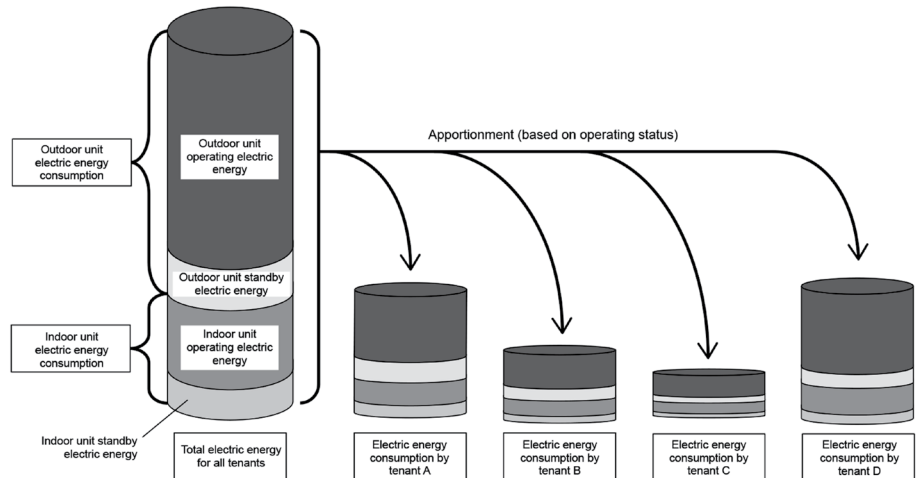
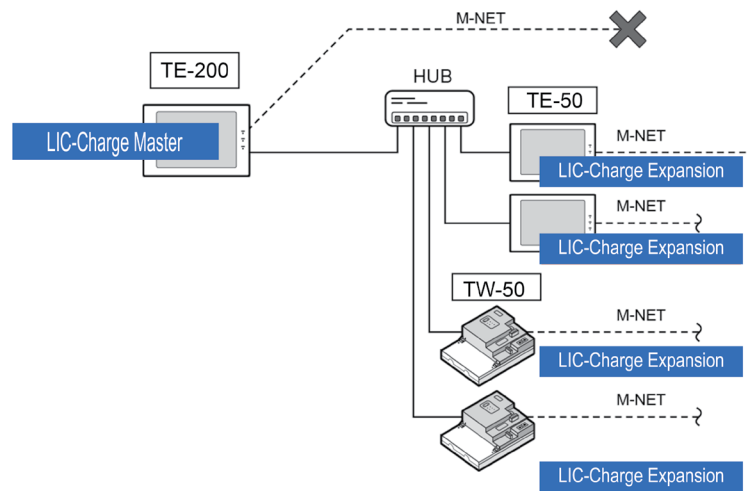
FEATURES

- Connect up to 40 TE-200A/TE-50A/TW-50A
 - Allows up to 2000 indoor units
- Allocate energy costs for the following:
 - Watt-Hour meter [kWh]
 - Water meter [MJ]
 - Calorimeter [m3]
 - Miscellaneous [/1 measurement unit]
- Automatically acquire energy data daily or monthly from TE-200 Apportionment
 - Data is automatically collected each day or month at 5 AM
 - Manual metered values input optional
 - Print out apportioned files
 - Output CSV apportioned files

SYSTEM REQUIREMENTS

- LIC-Charge license is required for each TE-200/TE-50/TW-50.
- A TE-200A is required to use billing function with either TE-50A or TW-50A Expansion Controllers
- Electric energy measurement using a PI controller is recommended. (If TE-50/TW-50 has a built-in Pulse Input (PI) and can be used where applicable)
- All centralized controllers must have the same firmware version installed
- Each TE-200 system requires their own electric energy pulse input(s)

SYSTEM CONFIGURATION WHEN USING AN APPORTIONED ELECTRICITY BILLING FUNCTION



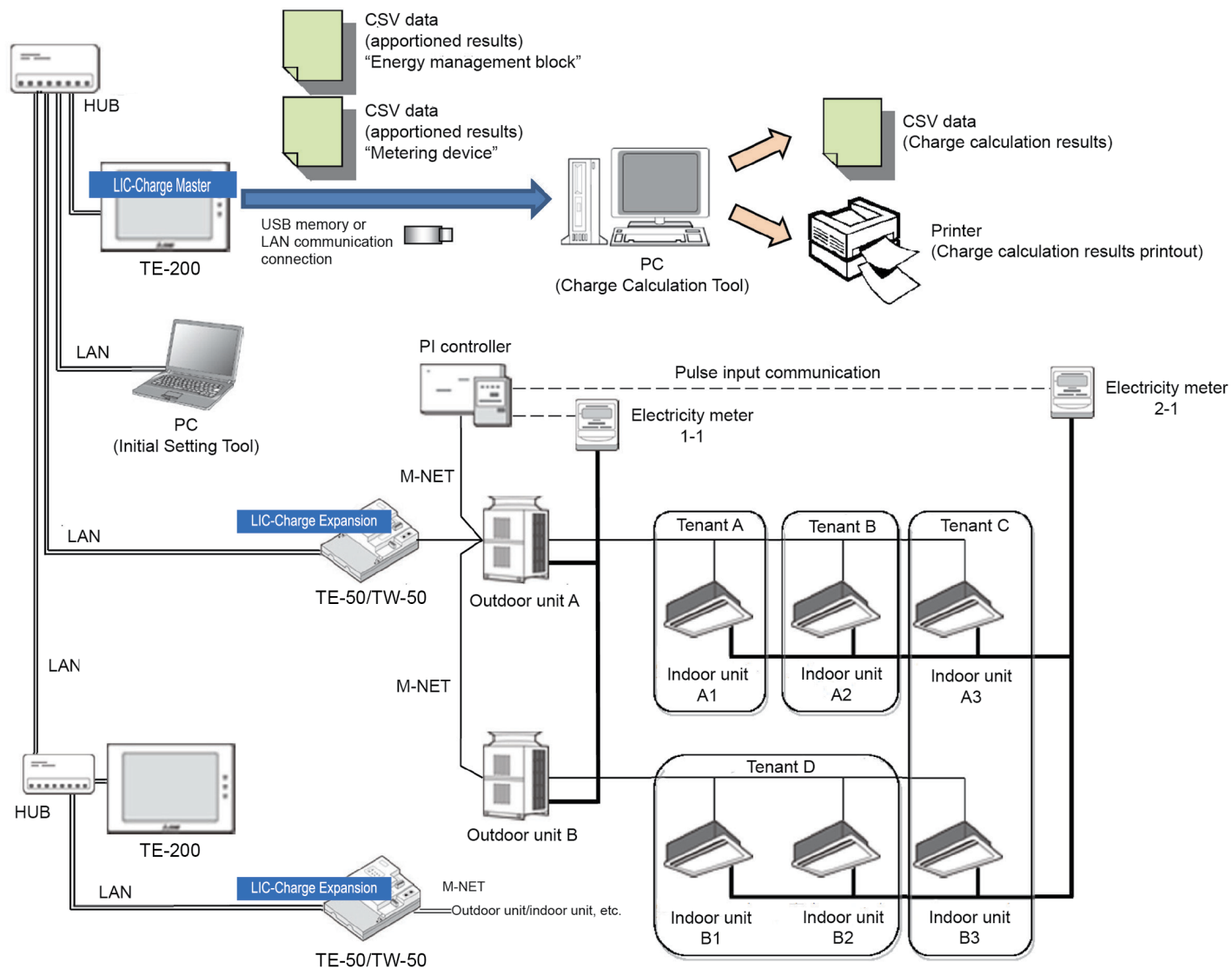
PC REQUIREMENTS

Charge Calculation Tool and Initial Setting Tool

Item	Specifications
CPU	1 GHz or better (at least 2 GHz recommended)
Memory	2 GB or more
Screen resolution	1024 x 768 or better
OS	Windows 7, Windows 8.1 (32bit/64bit)
System requirements	The system should meet the minimum requirements for windows 7 or windows 8.1 • NET Framework 4.5 or later
Internal	LAN port or LAN card 100 BASE-TX or better
Pointing Device	Mouse, etc.

LIC-CHARGE

NETWORK DIAGRAM



SYSTEM OVERVIEW

- Trane®/Mitsubishi Electric
- TE-200A Apportion controller
 - One Apportionment controller per 200 indoor units
- TE-50A or TW-50A expansion controller
 - One expansion controller per 50 indoor units
 - Up to four expansion controllers per TE-200 Apportion system
- PI Controller
 - With up to 4 electricity meters and current transducers
- Charge Tool software
 - This tool is required in order to use the TE-200 CSV data (apportioned results) to output the electricity charges for each tenant, either as a CSV file or as hard-copy printout.
- Initial Settings Tool software
 - This tool is required to make the settings for the apportioned electricity billing function

