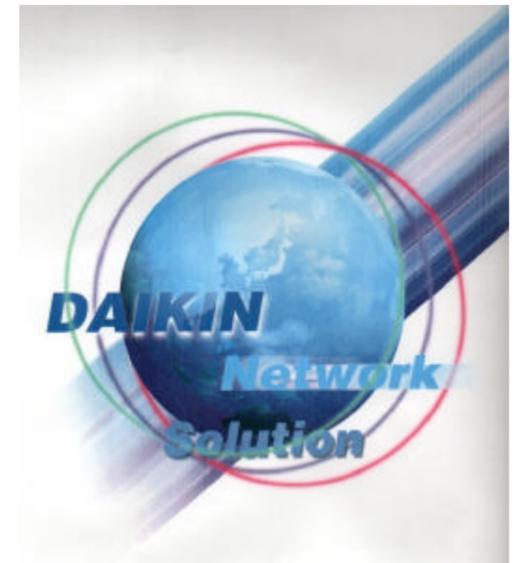# DS-net Engineering Data

# 1. Overview

For A/Cs used to cool facilities such as unmanned relay stations
- Local control [*1] for uninterrupted operation, backup operation, rotation operation, etc.
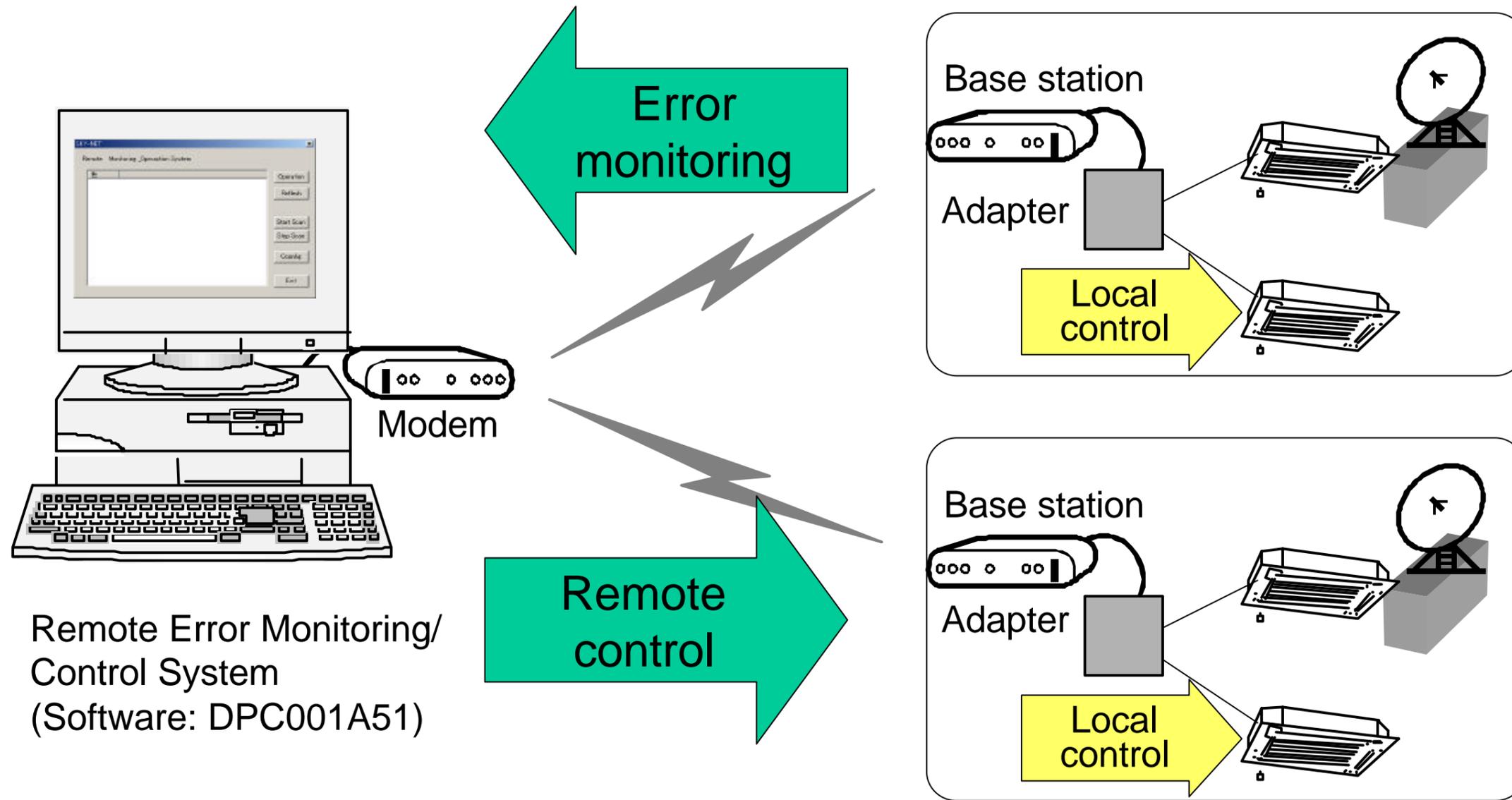- Remote error monitoring
- Remote control (Remote controller)

Light-structured system
- Error monitoring and local control ensured with moderately priced adapters
- Remote monitoring/control with any commercially available Windows PC or public phone lines

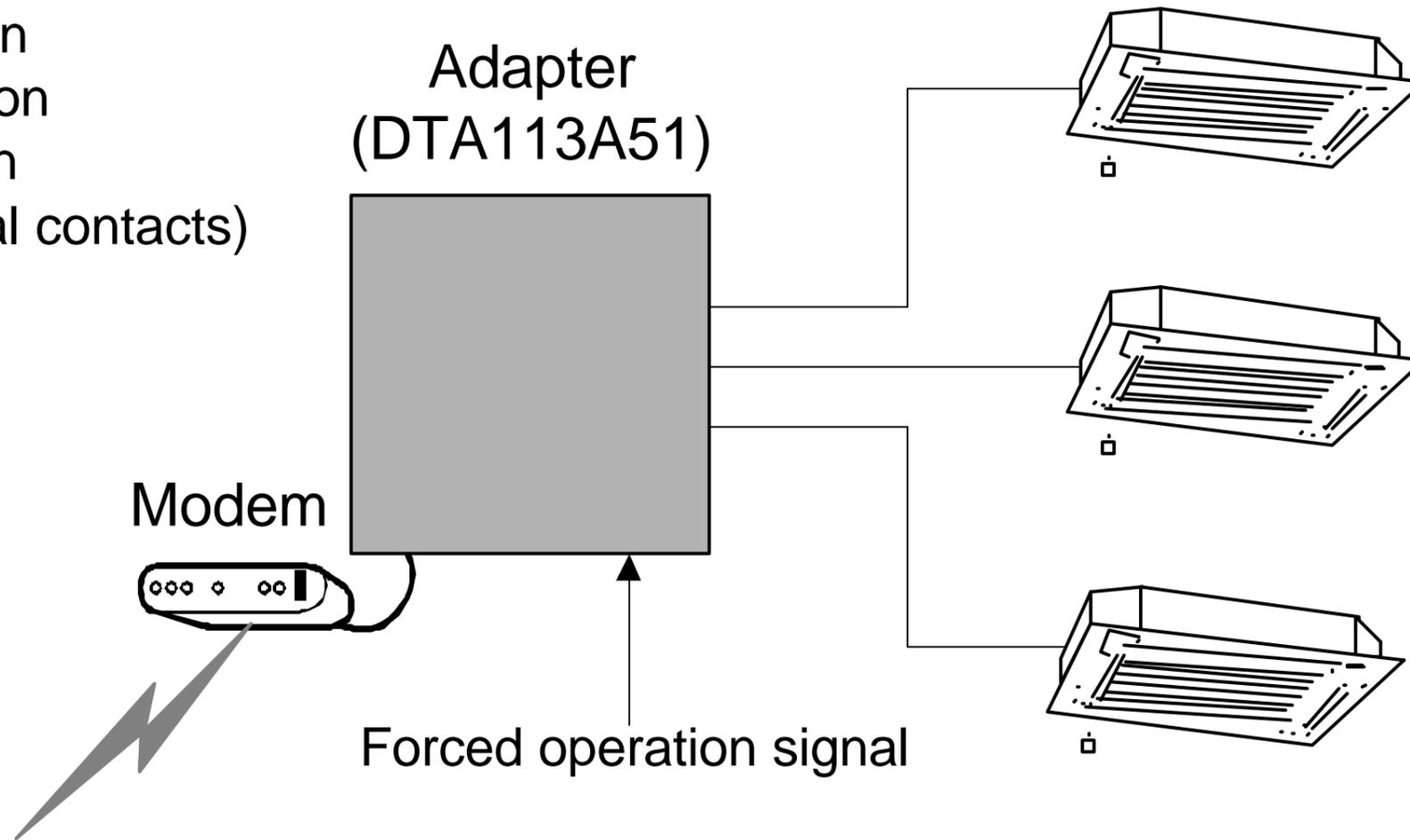*1: Uninterrupted operation is not a guaranteed function.

# 2-1. System Overview

# 2-2. System Overview (Site)

<Local Control>
- Backup operation
- Rotation operation
- Forced operation
  (through external contacts)

Adapter
(DTA113A51)

Modem

Forced operation signal

<Remote Error Monitoring/Control>

- Errors are communicated to the monitoring system.

- Remote instructions are subsequently given.

# 3-1. Features (System)

**<Remote Error Monitoring Function>**

- Error monitoring through real-time error reports sent from the adapters

- Status monitoring via automatic scanning with a PC up to four times a day

- Status monitoring via manual scanning of the entire system or individual units

**<Remote Control Function>**

- Remote control function on the PC

  Start/Stop, temperature setting, operation mode setting, etc. (equivalent to functions provided by a remote controller)

**<Others>**

- Print/Data export

- Communications log functions

- Security functions via password management of adapters and PC software

- A single PC can be used for error monitoring and control of up to 50 sites (up to 150 air conditioners).

# 3-2. Features (Local Control)

**\<Local Control Function\>**

- Automatic backup operation upon error occurrence

- Rotation operation that evens out A/C operation over the product's life cycle

- Controls the number of A/C units to be simultaneously operated

- Up to three A/C units can be monitored/controlled with one adapter.

**\<Error Monitoring Function\>**

- Detected errors are immediately relayed to the PC.

**\<Other\>**

- Forced Start/Stop operation through external signals

- Power supply from A/C units

# 3-3. Features (Monitoring software)

• Main Screen (Overview)

Displays information obtained in the previous communication. Lettering will turn red when an error is detected.

It brings up a separate window for a real-time report when an error occurs.

Log-in / Log-out

Displays More Detailed Information

Control Function
- A/C operation
- Adapter operation

Manual Scan Function
- All/Individual

System Setting
Print/Export



| No | A/C na... | Adapte... | Lin... | Opeart... | Malf... | Roo... | Site na... | Latest co... | Comm |
|----|-----------|-----------|--------|-----------|---------|--------|-----------|--------------|------|
| 1 | A/C1 | 10000... | 0 | 'åŽ~ | 00 | 0 | SITE000 | 2001/08/... | 0000 |
| 2 | A/C2 | 20000... | 0 | ‰‹"] | A9 | 0 | SITE001 | 2001/08/... | 0000 |
| 3 | A/C3 | 30000... | 0 | 'åŽ~ | 00 | 0 | SITE001 | 2001/09/... | 0000 |
| 4 | A/C4 | 40000... | 0 | 'åŽ~ | 00 | 0 | SITE001 | 2001/09/... | 0000 |
| 5 | A/C5 | 50000... | 0 | 'åŽ~ | 00 | 0 | SITE001 | 2001/09/... | 0000 |
| 6 | A/C6 | 60000... | 0 | 'åŽ~ | 00 | 0 | | 2001/09/... | 0000 |
| 7 | A/C7 | 70000... | 0 | 'åŽ~ | 00 | 0 | | 2001/09/... | 0000 |
| 8 | A/C8 | 80000... | 0 | 'åŽ~ | 00 | 0 | | 2001/09/... | 0000 |

Detailed i

Operation
A/C
Adapter

Scanning
Individual
All site

Sytem Setting
Print/Export
Error Info.
Exit

DSnetErr [F¥DSNE

| No | A/C name | ...pter ID | Line No | Latest comm. time | Type of ... |
|----|----------|-----------|---------|-------------------|-------------|
| 2 | A/C2 | 0000000000 | 0 | 2001/08/24 21:39:22 | Malfuncti... |

Buzzer OFF          Close

## • Monitoring/Detailed Info

Operation status/detailed information on A/C units
  Start/Stop, Operation mode, Room temperature, etc.
Detailed information on adapters
  Local control parameters, Telephone number, etc.

Operation Status/Detailed Info on A/C units

Detailed Info on Adapters

## • Remote Operation

A/C Operation
   Start/Stop, Operation mode, Temperature setting, Airflow rate, etc.
Adapter setting
   Local control parameters, etc.

# 4-1. Specifications

- ## Support A/C

Mid-level static pressure duct  FD(Y)M ~ F(A)
Corner                                    FHYK-F
Built-in                                   FHYB-
Wall-mounted                 FAY-F
Ceiling-suspended        FHY-B         [KRP1C93]
Floor-standing              FVY-L         [KRP4A95]
High static pressure duct    FDY ~ K(A)   [KRP1B100]
Four-way cassette        FHYC-K      [KRP1B98, Super Cassette for Asia]
Four-way cassette        FHYC-B      [RP1C98, New Super Cassette for Europe]
Wonderful                  FUY-F        [KRP1B97]
Low static pressure duct     FDYB to K(A)  [KRP1B100]

Figures in parentheses [ ] denote the model codes on the installation plates and boxes.

  * RAs are not supported.
  * Contact your DAIKIN representative with regard to any matters pertaining to VRVs.

# DAIKIN DSnet System

## • PC, Modem

### PC

| | |
|---|---|
| CPU: | Celelon (500 MHz) or higher-grade CPU |
| Memory: | 64 MB min. (128 M recommended) |
| HDD: | 6 GB  (Free space of at least 1G) |
| Monitor: | At least 800*600 (256 colors) |
| Windows: | Windows 2000, Windows NT4.0 (SP4 or later version) |
| | (Windows95, 98 and Me are not supported) |

Do not use PC functions such as standby and sleep because the PC is used for continuous error monitoring.

### Modem

Zoom, model 2948 or equivalent recommended.

\* The same type of modems must be used in the PCs and at the site(s) in order to maintain compatibility between these.

# 5. Q & A

Is it possible to operate air conditioners at a moment's notice in cases where the room temperature suddenly rises?

Yes, by sending a forced operation signal to the adapter with external sensors. However, the system does not communicate temperature errors and the like.
* Contact your DAIKIN representative for details.

Does the system require a backup power supply?

Power supply for the adapter is taken from that intended for air conditioners so it depends on the A/C backup function.
In order to protect the PC from accidental power failures, the installation of a UPS (uninterruptible power supply) is recommended.

Is it possible to remotely monitor/control A/Cs other than SkyAir?

RAs are not supported.
Contact your DAIKIN representative with regard to any matters pertaining to VRVs.

# DAIKIN DSnet System

<u>Is it possible to use multiple PCs to monitor the system?</u>

No. The system is not designed to perform remote monitoring/control from a multiple number of PCs partly due to light structure concept. A single PC can adequately monitor/control up to 50 sites.

<u>Is it possible to connect the system to one unique to a specific customer?</u>

No. This system does not support connections between the DS-NET System and customer's host system.
The customers can, however, develop their own monitoring system (software) by utilizing adapters. Please inquire with your DAIKIN representative for further details.

# DAIKIN DSnet System

What is the difference between AIRNET and DS-NET?

The DS-NET is a system that enables a customer to monitor/control its A/C system. Whereas, the AIRNET is a service whereby DAIKIN, instead of the customer, monitors the A/C system, which includes the detection of A/C malfunctions and prediction of possible errors.

What is the difference between the intelligent Manager and DS-NET?

The intelligent Manager and intelligent Touch Controller are systems used for the centralized monitoring and energy efficient control of a multiple number of A/C units installed in a building and the like.