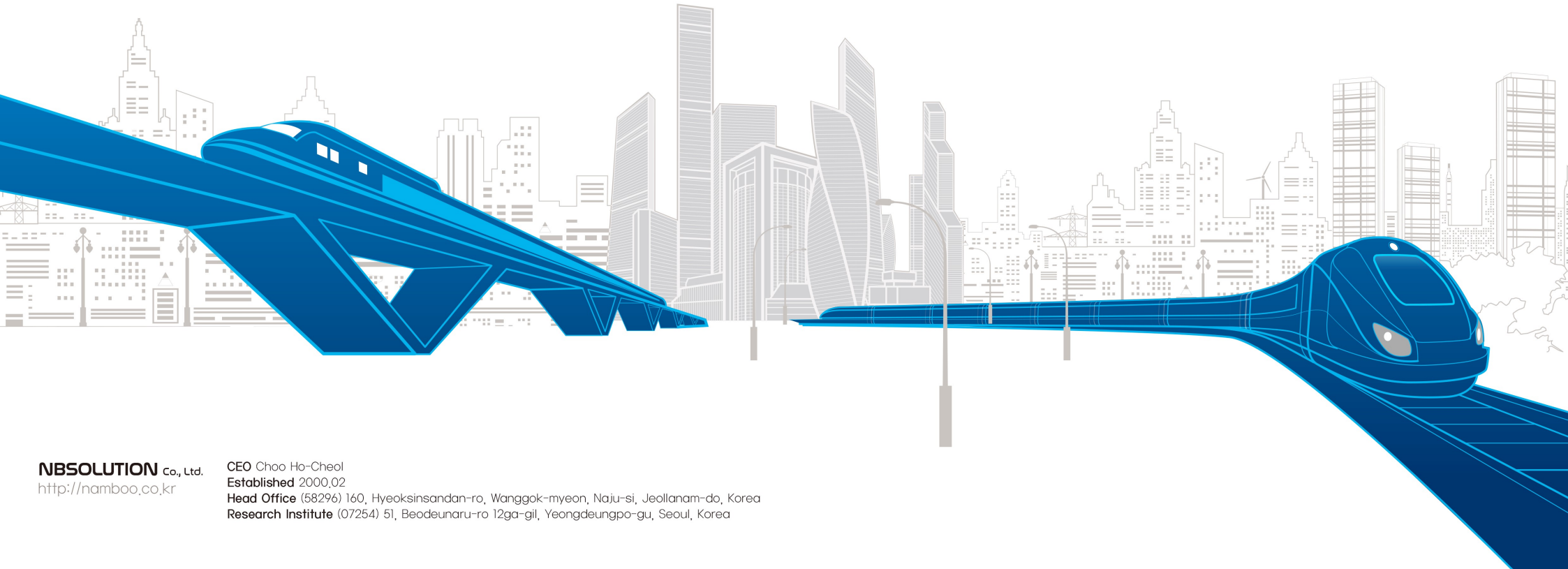
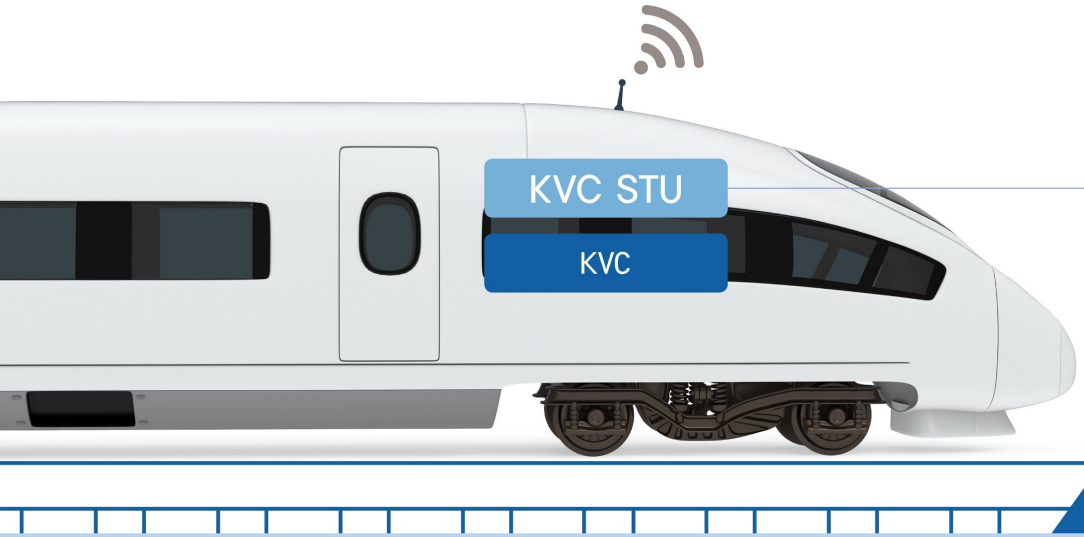
NB SOLUTION



NBSOLUTION Co., Ltd.
http://namboo.co.kr

CEO Choo Ho-Cheol
Established 2000.02
Head Office (58296) 160, Hyeoksinsandan-ro, Wanggok-myeon, Naju-si, Jeollanam-do, Korea
Research Institute (07254) 51, Beodeunaru-ro 12ga-gil, Yeongdeungpo-gu, Seoul, Korea

STU



Radio Block Center (RBC)

Safety Transmission Unit

Safety Transmitting & Ensuring **Integrity**

of Subset-026 between **KVC** and **RBC**

COMMON APPLICATION STANDARD

- SUBSET-026, ERTMS/ETCS, System Requirements Specification
- SUBSET-037, Euroradio FIS
- SUBSET-098, RBC-RBC Safe Communication Interface
- SUBSET-114, KMC-ETCS Entity Off-line KM FIS

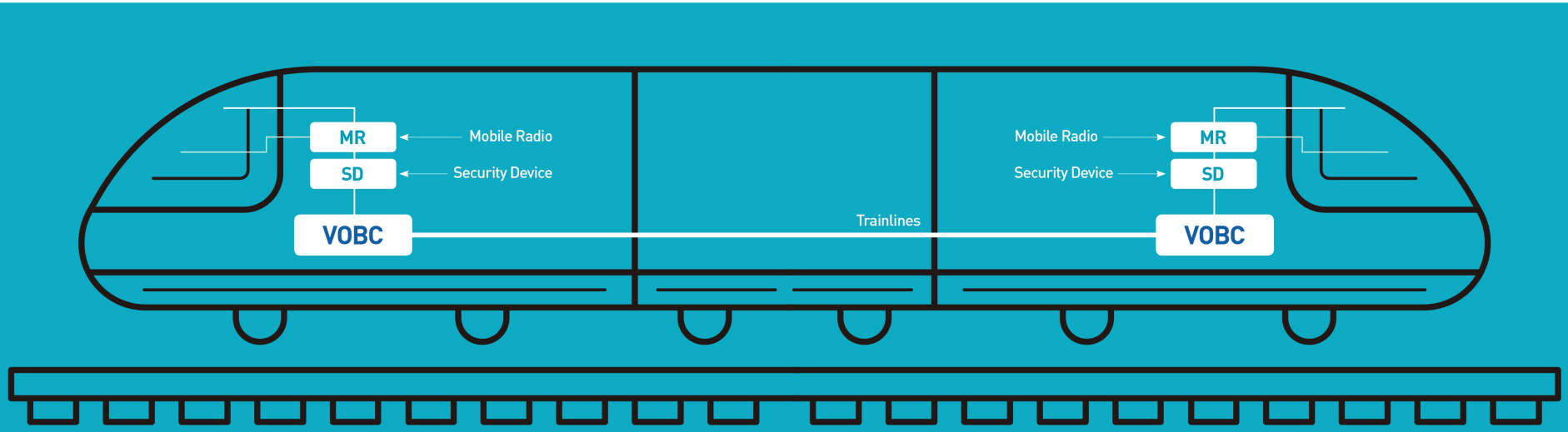
COMMON SPECIFICATION

- Dual core Arm®Cortex™-A53
- CPU Freq up to 1.5GHz
- Armv8-A Architecture(64bit)
- Ethernet 100/1000 Base-T / 8ports
- USB 2.0(Host) type-A / 2ports
- USB 2.0(Client) type-B / 1port
- UART(Serial) / 4ports

RBC STU

KVC STU

IRU



the core device of train control systems
Localization of the **IRU** system

IRU

Interface Relay Unit

As an interface relay device, it serves as a subordinate device of the KVC signal device in the train control system, responsible for the interface of vital/Non Vital information between the vehicle system and the KVC signal device

STRENGTH

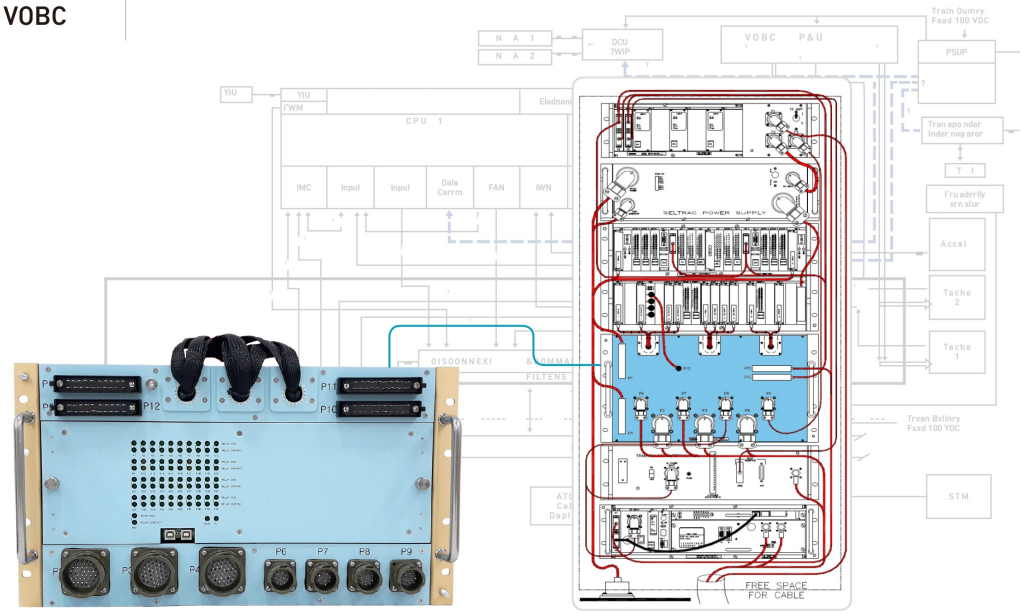
The internal relay operation status can be externally monitored by operators.

Unlike conventional maintenance procedures, it can be performed without the need for removal or disassembly.

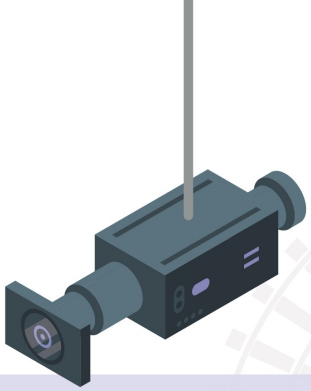
The relay operation frequency is recorded,
enabling lifespan prediction and preventive maintenance through logging functionality.

- ***Reduced*** *frequency of train malfunctions*
- ***Quick*** *maintenance and response*
- ***Improvement*** *in train operation efficiency*

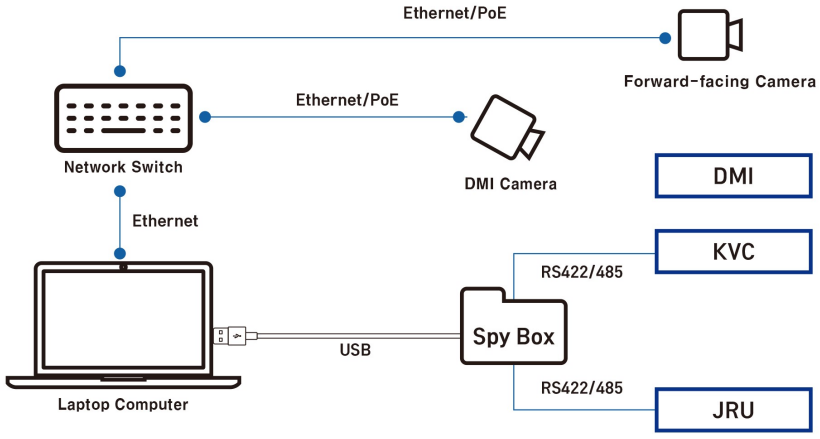
VOBC



ERTMS CAMCORDER



*Constructing **track maps***
Recording and tracking KVC data
Verified testing equipment
*Providing **reports***



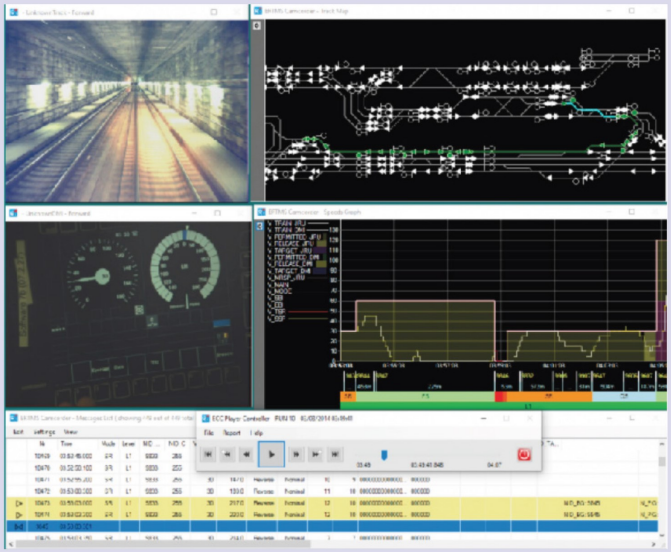
KEY FUNCTIONS

- **DMI** display & recording
- **Forward-facing camera** screen display & recording
- **Speed graph** display & recording
- **Track map progress** display & recording
- **Real-time message** display & recording
- **Visualized** user interface
- **Reproduction and verification** of test results through playback
- **KVC-JRU** Interface

Laptop Computer
Including software for trial runs
Interface for various data collection

Camera
Recording the forward-facing view
Recording the DMI screen

Network Switch
Transmitting camera visuals to a laptop
Providing an interface for camera control



Spy Box
Message capture tool KVC-JRU

UPS
Reliable power supply device

Storage Box
Safely storing components