DragonTech
VISION • INNOVATION • CREATION

www.dragontech.hk

COMPANY

© Dragontech Systems | www.dragontech.hk

Company Introduction
Application Space

Metro
and Train
Transportation

Defence

Bus
Transportation

Industrial

Public
Safety

- Ruggedness
- Reliability
- Extended Temperature
- High Availability
- Scalability

Company Introduction
Our Global Footprint

Production

R &D - Engineering

Sales

Logistics

Administration

Lyon -France

Bangalore

Thailand

Hong Kong (HQ)

DURION 1300
System Overview

DURION 1300
Wireless MVB Gateway

© Dragontech Systems | www.dragontech.hk

Railway System Design
Key Considerations

1. **System Definition**
    –   Price advantage through full-integration
    –   Reliability and maintenance cost
    –   Lifecycle costs (scaling and upgrading)
    –   Cost of system downtime, quality and reliability
    –   Future proof

2. **Compliance**
    –   *EN50155 –T3 temperature compliance*
    –   EN50121, EN55011 electromagnetic and EMC compliance
    –   EN61373 shock and vibration
    –   EN60950 safety and UNI CEI 11170-3 Fire-Smoke compliance

3. **Integration**
    –   Support for MVB (ESD+ and EMB)
    –   GSM-R/GPRS data modem
    –   Serial and Ethernet ports
    –   High-Rel ATOM CPU Module
    –   SSD mass storage for OS, application and data
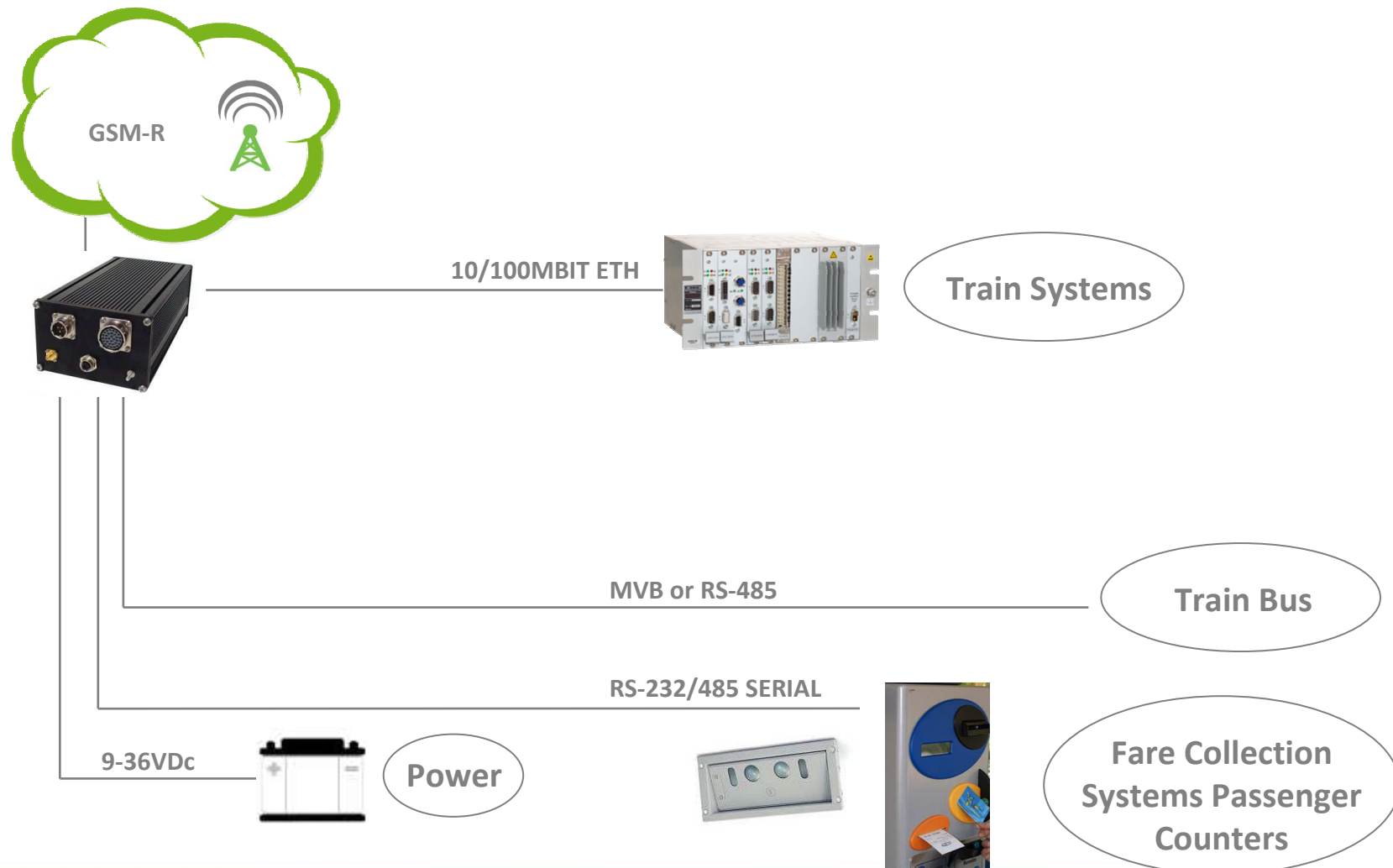   –   Purpose-built enclosure, power supply and protection

Intelligent Gateway
DURION 1300 – GSM-R and MVB Gateway

GSM-R

10/100MBIT ETH — **Train Systems**

MVB or RS-485 — **Train Bus**

RS-232/485 SERIAL

9-36VDc — **Power**

Fare Collection Systems Passenger Counters

Dragontech Systems | www.dragontech.hk

DURION 1300
System Highlights

1. **Purpose Built**
   - **Ultra-Rugged sealed IP65 anodized extruded aluminum enclosure**
   - **MIL I/O-connector, M12 Ethernet, Dual D-9 MVB and SMA connectors**
   - **Wide range power supply 9-36VDc, 3-pole MIL connector**
   - **Rolling stock overvoltage, protection and EMC filtering**
   - **Wide temperature range, -25 to +55°C operating, fanless and conduction cooled**
   - **Flash disk for storage and OS**
   - **Compliance to required standards**

2. **Integrated**
   - **1,3GHz Intel ATOM Z510 processor, 1GB RAM, 2GB Onboard soldered Flash Disk**
   - **10/100Mbit ETH, 2x Serial, 1x USB 2.0**
   - **Selex RGM101 GSM-R / GPRS modem – Data and SMS support**
   - **Duagon D114L MVB-bus interface integrated inside - ESD+, EMD support, compliant with TCN standard IEC61375.**
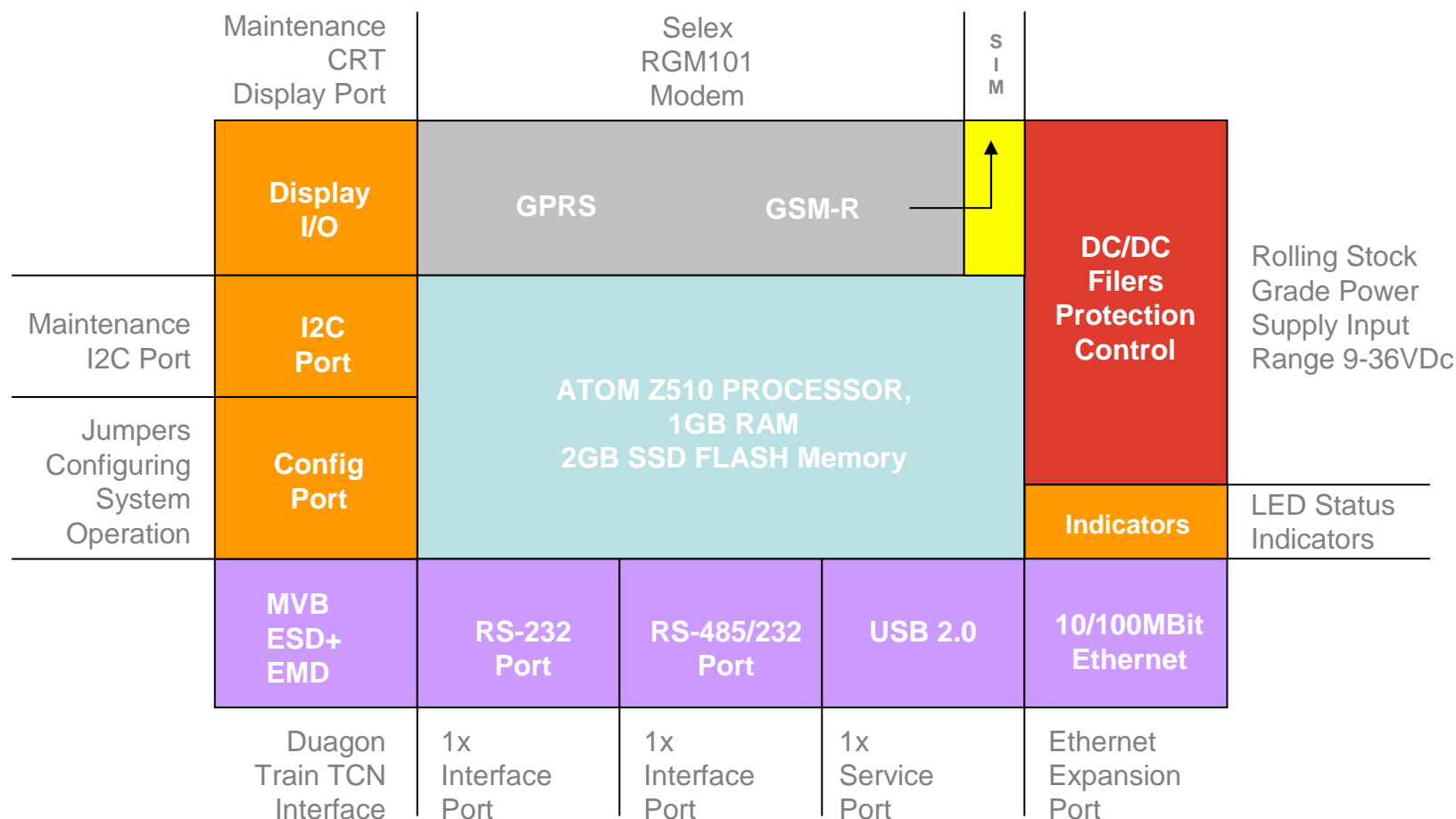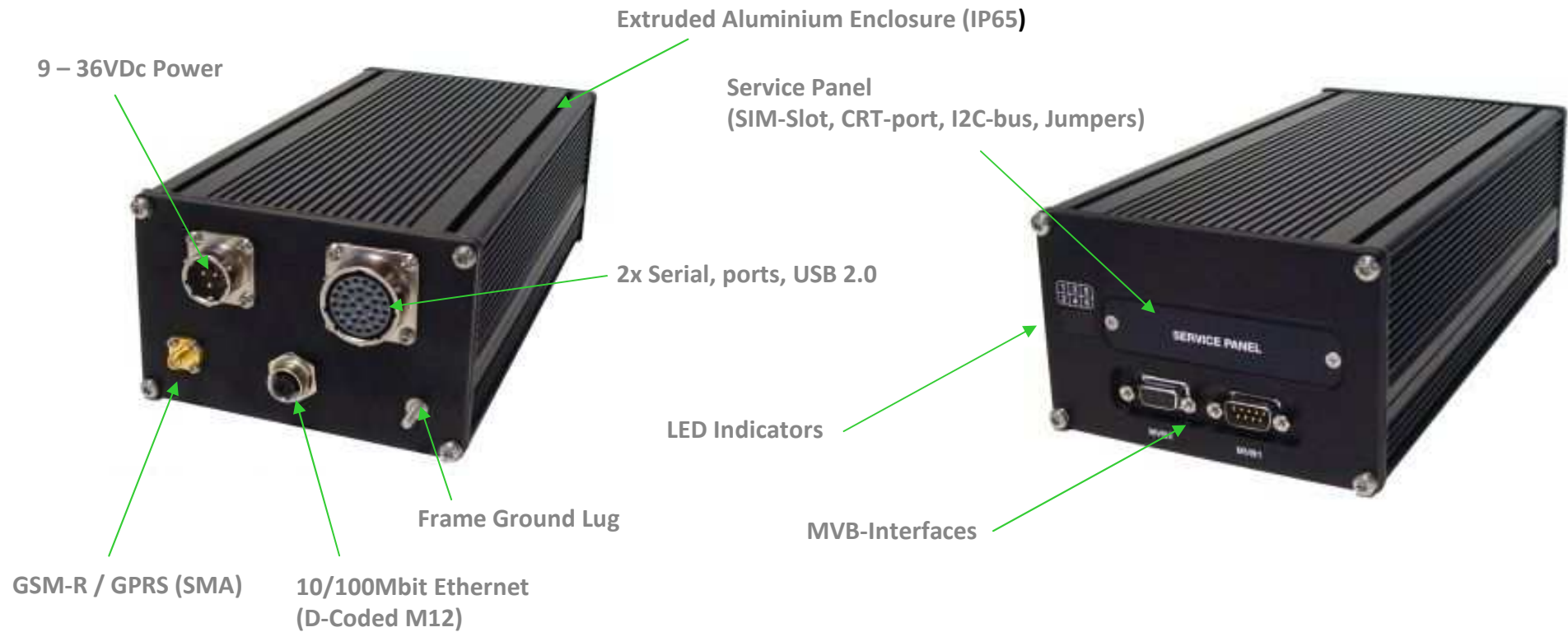
DURION 1300
Block Diagram

Maintenance CRT Display Port		Selex RGM101 Modem		S I M	
Display I/O	**GPRS**		**GSM-R**		**DC/DC Filers Protection Control**
Maintenance I2C Port → **I2C Port**	**ATOM Z510 PROCESSOR, 1GB RAM 2GB SSD FLASH Memory**				Rolling Stock Grade Power Supply Input Range 9-36VDc
Jumpers Configuring System Operation → **Config Port**					
					Indicators → LED Status Indicators
MVB ESD+ EMD	**RS-232 Port**	**RS-485/232 Port**	**USB 2.0**	**10/100MBit Ethernet**	
Duagon Train TCN Interface	1x Interface Port	1x Interface Port	1x Service Port	Ethernet Expansion Port	

DURION 1300
Connectors and Enclosure

Extruded Aluminium Enclosure (IP65)

9 – 36VDc Power

**Service Panel
(SIM-Slot, CRT-port, I2C-bus, Jumpers)**

2x Serial, ports, USB 2.0

SERVICE PANEL

LED Indicators

Frame Ground Lug

MVB-Interfaces

GSM-R / GPRS (SMA)

**10/100Mbit Ethernet
(D-Coded M12)**

DURION 1300
Dimensions

SQUARE NUT M4
INOX A2 DIN562

254
243
52,5
129
52,5
4xM4
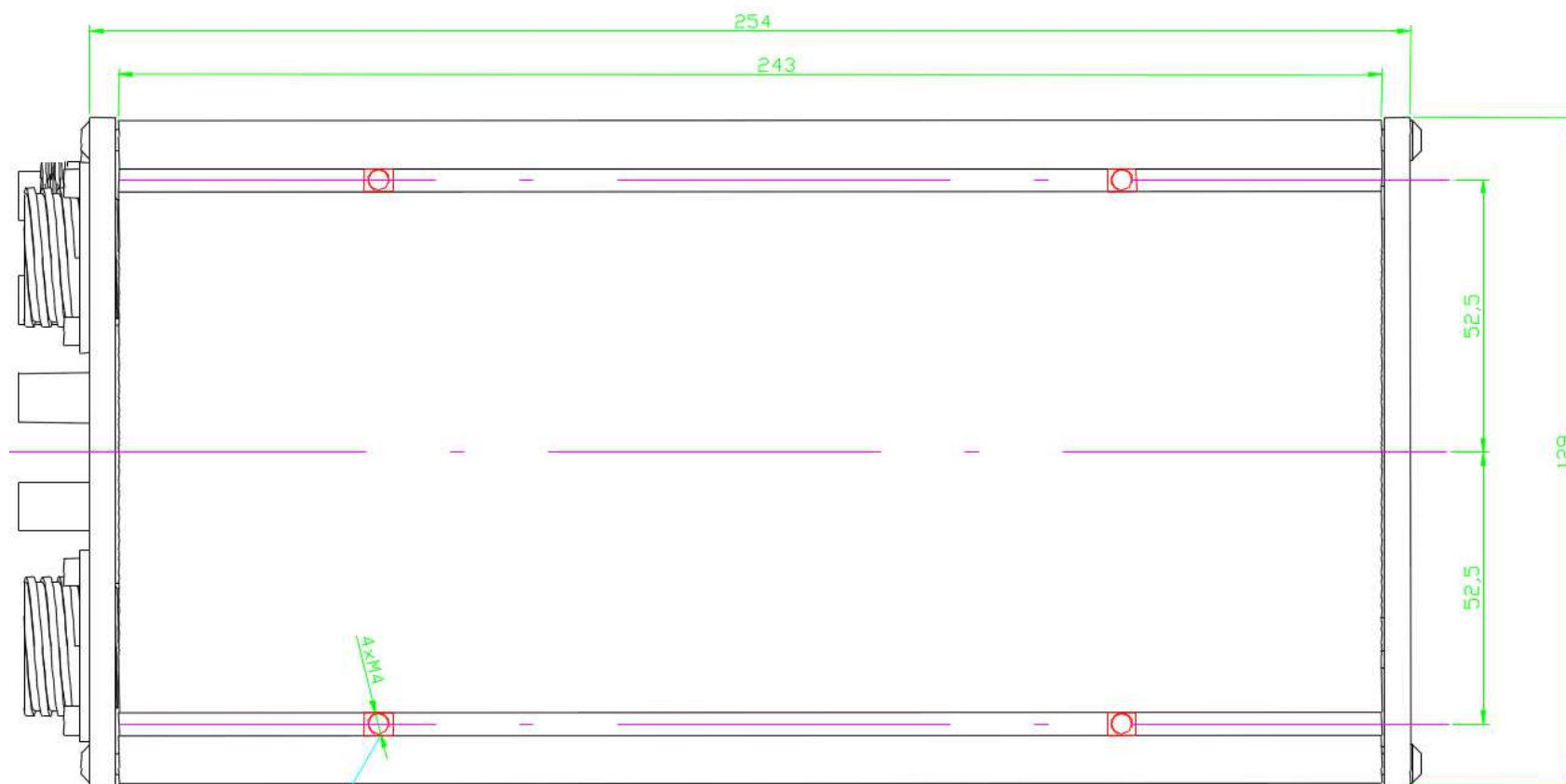
Company
Contact Information

Asia Headquarters

www.dragontech.hk
sales@dragontech.hk