

# **COVID-19 Nucleic Acid Test Solution**

## **P2+Mobile Nucleic Acid Test Lab**

# 1 Semi-trailer P2+ NAT (STD) - Configuration

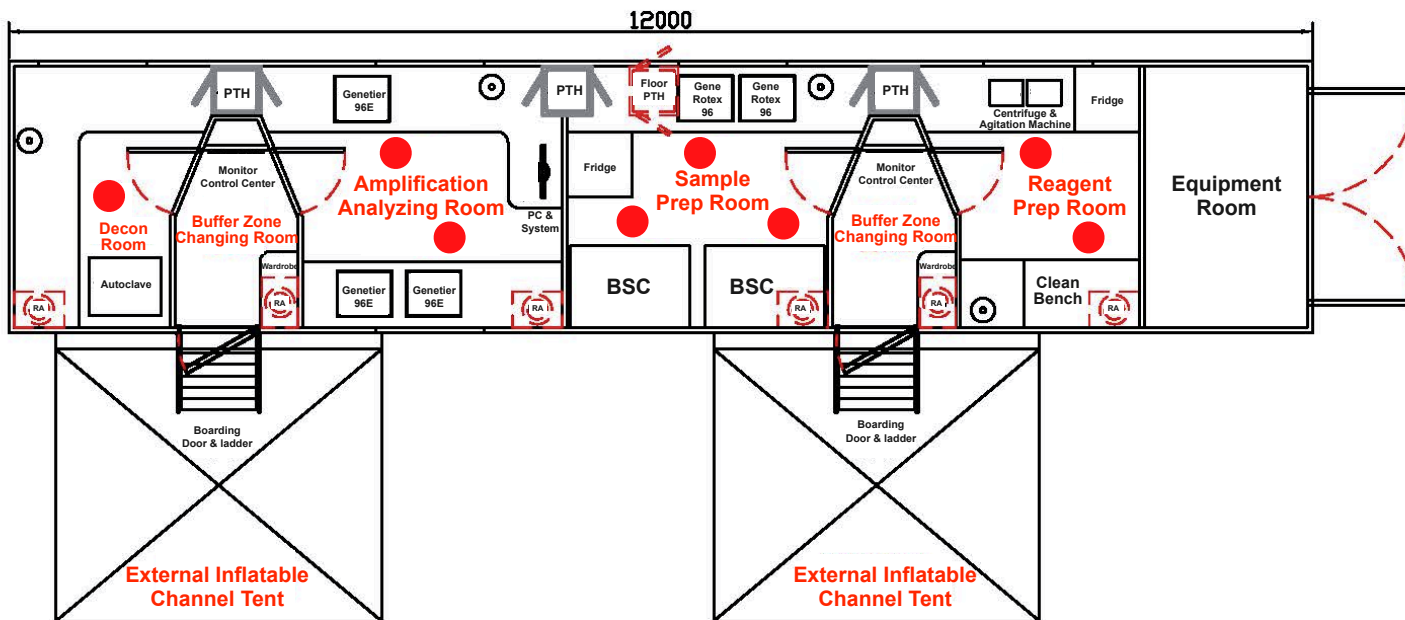
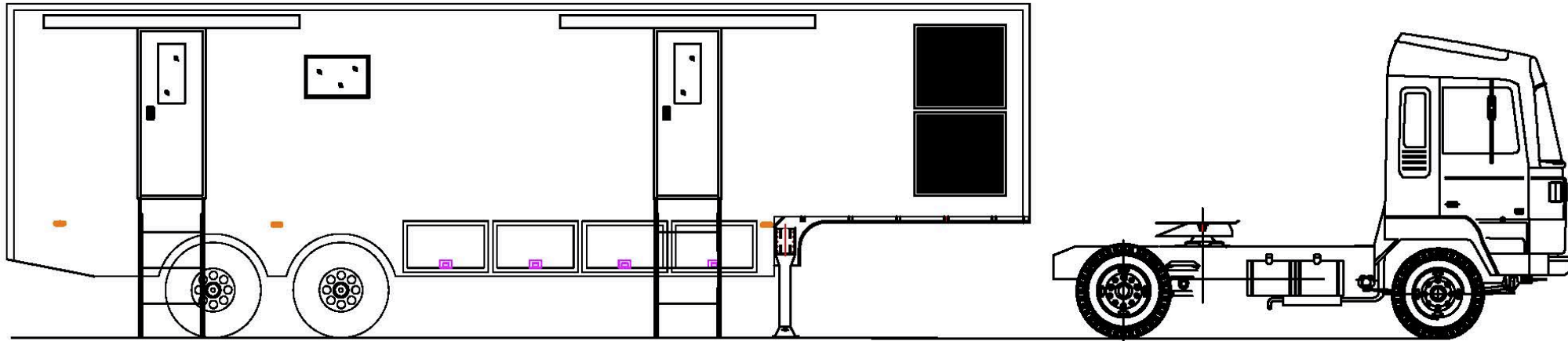
RAY10

1. Composed of buffer area, reagent preparation area, sample preparation area, amplification analysis area, decontamination room, and equipment room. The outer door of the cabin and the connecting door of each cabin adopt special airtight technology;
2. Set up monitoring and communication system equipment in each section. During the work, each area can monitor the sample preparation area and nucleic acid test area and communicate with them in voice;
3. Set up cleaning and disinfection equipment and lockers in the buffer zone and side-opening doors on the partition wall of the buffer zone, and it uses automatic locking doors controlled by electric interlocking for security.
4. Provide space for at least 8 people to work simultaneously, and have enough storage space and workbenches to place instruments and equipment, and set up medical refrigerators, biological safety cabinets, ultra-clean workbenches, sample preparation and testing equipment, etc.;
5. Deploy ultra-clean workbenches, medical refrigerators, mixers, centrifuges and transfer windows in reagent preparation area;
6. Deploy biological safety cabinet, medical low-temperature refrigerator, nucleic acid extraction instrument, workbench and transfer window, etc. in sample preparation area;
7. Deploy workbench, fluorescence quantitative PCR analyzer, computer and UPS system, transfer window, etc. in the amplification analysis area;
8. Install air-conditioning, fresh air filter host and optional silent generator set and other auxiliary equipment in the equipment area;
9. Install an autoclave and decontamination workbench in decontamination room;
10. The platform on the top of the cabin is reinforced for car roof inspection and maintenance;
11. Deploy batteries, UPS, tools, etc., as well as auxiliary equipment and accessories experimental testing in the storage compartment ;
12. Deploy a sunshade in the external boarding platform of the vehicle.



# 1 Semi-trailer P2+ NAT (STD) - Configuration

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➤ 8~10 people working simultaneously

➤ Test throughput : 1500/8h~3000/24h

➤ Automatic testing equipment :

Auto sample processing system: Tianlong GeneMix 48 \* 1

Auto rotary nucleic acid extractor: Tianlong GeneRotex96 \* 2

Auto PCR analysis system: Tianlong Gentier 96E \* 3

➤ Operation monitoring system : OSMS

\* BSC: Biological Safety Cabinet

\* PTH: Pass Through Hatch

\* Decon Room: Decontamination Room

\* RA: Return Air

## 2 Semi-trailer P2+ NAT(PRO) - Overview

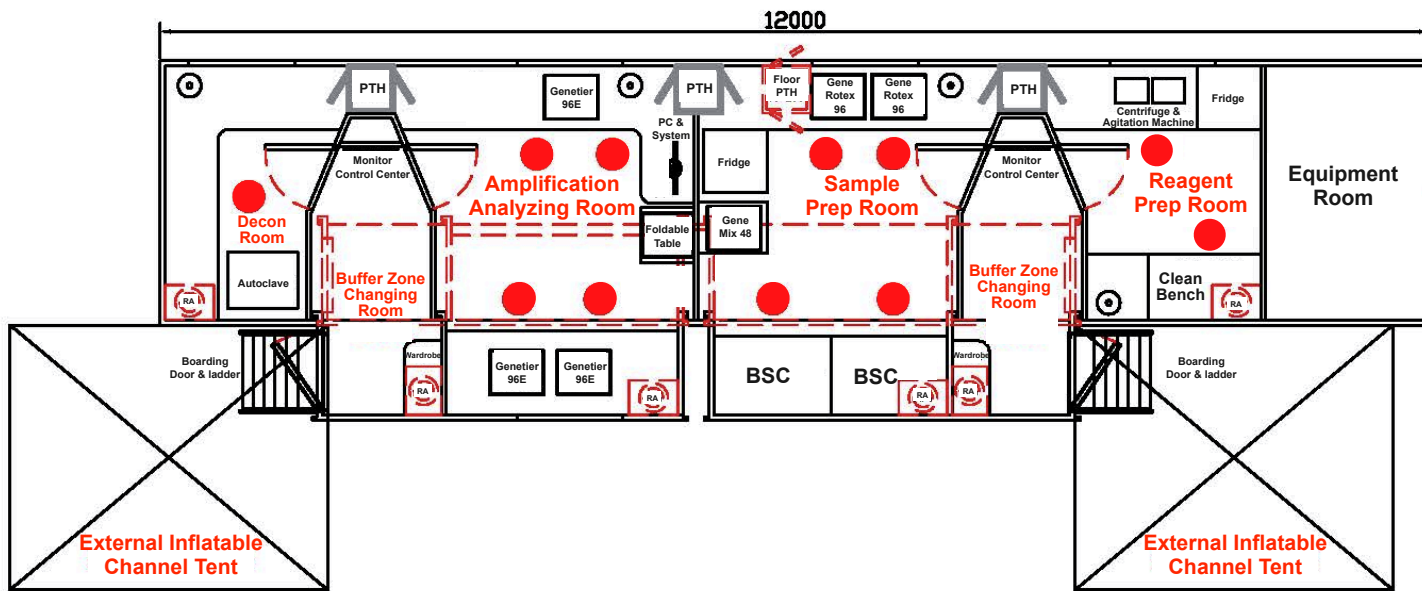
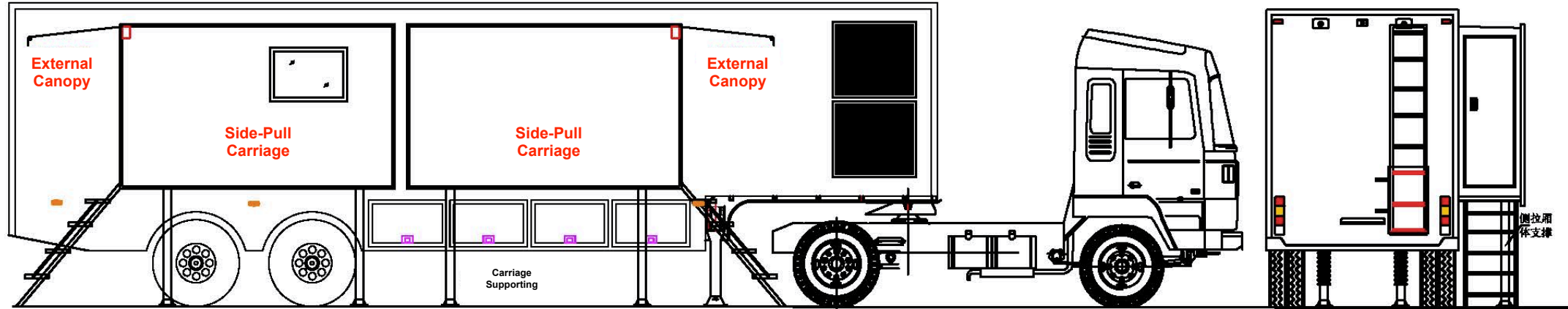
RAY10

1. Composed of buffer area, reagent preparation area, sample preparation area, amplification analysis area, decontamination room, and equipment room. The right side of the cabin expands the internal use space through the double-sided pull box structure. The outer door of the cabin and the connecting door of each cabin adopt special airtight technology;
2. Set up monitoring and communication system equipment in each section. During the work, each area can monitor the sample preparation area and nucleic acid test area and communicate with them in voice;
3. Set up cleaning and disinfection equipment and lockers in the buffer zone and side-opening doors on the partition wall of the buffer zone, and it uses automatic locking doors controlled by electric interlocking for security.
4. Provide space for at least **8~12 people** to work simultaneously, and have enough storage space and workbenches to place instruments and equipment, and set up medical refrigerators, biological safety cabinets, ultra-clean workbenches, sample preparation and testing equipment, etc.;
5. Deploy ultra-clean workbenches, medical refrigerators, mixers, centrifuges and transfer windows in reagent preparation area;
6. Deploy biological safety cabinet, medical low-temperature refrigerator, nucleic acid extraction instrument, workbench and transfer window, etc. in sample preparation area;
7. Deploy workbench, fluorescence quantitative PCR analyzer, computer and UPS system, transfer window, etc. in the amplification analysis area;
8. Install air-conditioning, fresh air filter host and optional silent generator set and other auxiliary equipment in the equipment area;
9. Install an autoclave and decontamination workbench in decontamination room;
10. The platform on the top of the cabin is reinforced for car roof inspection and maintenance;
11. Deploy batteries, UPS, tools, etc., as well as auxiliary equipment and accessories for experimental testing in the storage compartment ;
12. Canopies can be externally hung on the boarding ladders on both sides of the side-pull car body to facilitate the entry and exit of personnel in rain and snow; and an inflatable tunnel tent can be connected.



## 2 Semi-trailer P2+ NAT(PRO) - Configuration

RAY10



- > 8~12 people working simultaneously
- > Test throughput : 1500/8h~3000/24h
- > Automatic testing equipment :
  - Auto sample processing system: Tianlong GeneMix 48 \* 1
  - Auto rotary nucleic acid extractor: Tianlong GeneRotex96 \* 2
  - Auto PCR analysis system: Tianlong Gentier 96E \* 3
- > Operation monitoring system : OSMS

## 2 Semi-trailer P2+ NAT (PRO)-Showcase

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### 3 12m Bus P2+ NAT - Overview

RAY10

1. Composed of buffer area, reagent preparation area, sample preparation area, amplification analysis area and decontamination room. The right side of the cabin expands the internal use space through the double-sided pull box structure. The outer door of the cabin and the connecting door of each cabin adopt special airtight technology;
2. Set up monitoring and communication system equipment in each section. During the work, each area can monitor the sample preparation area and nucleic acid test area and communicate with them in voice;
3. Set up cleaning and disinfection equipment and lockers in the buffer zone and side-opening doors on the partition wall of the buffer zone, and it uses automatic locking doors controlled by electric interlocking for security.
4. Provide space for at least **8~12 people** to work simultaneously, and have enough storage space and workbenches to place instruments and equipment, and set up medical refrigerators, biological safety cabinets, ultra-clean workbenches, sample preparation and testing equipment, etc.;
5. Deploy ultra-clean workbenches, medical refrigerators, mixers, centrifuges and transfer windows in reagent preparation area;
6. Deploy biological safety cabinet, medical low-temperature refrigerator, nucleic acid extraction instrument, workbench and transfer window, etc. in sample preparation area; (Optional: automatic sample cupping system and automatic nucleic acid extractor)
7. Deploy workbench, fluorescence quantitative PCR analyzer, computer and UPS system, transfer window, etc. in the amplification analysis area;
8. Install an autoclave and decontamination workbench in decontamination room;
9. Install air-conditioning, fresh air filter host, and optional silent generator set, lithium battery and other auxiliary equipment, as well as auxiliary equipment and other accessories for experimental testing in the bottom.

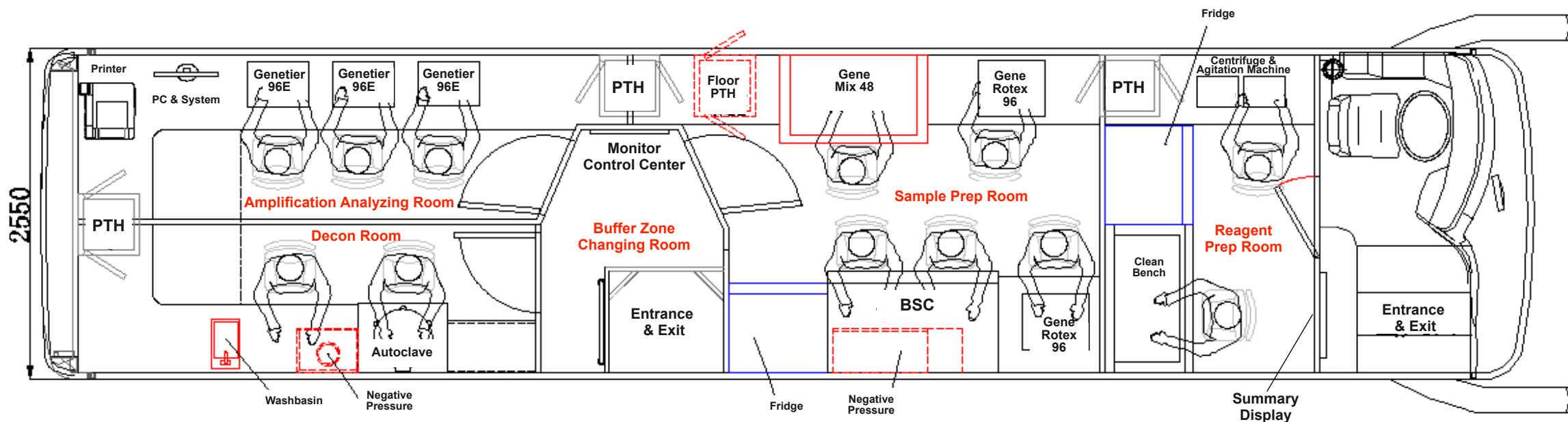


### 3 Bus P2+ NAT - Showcase

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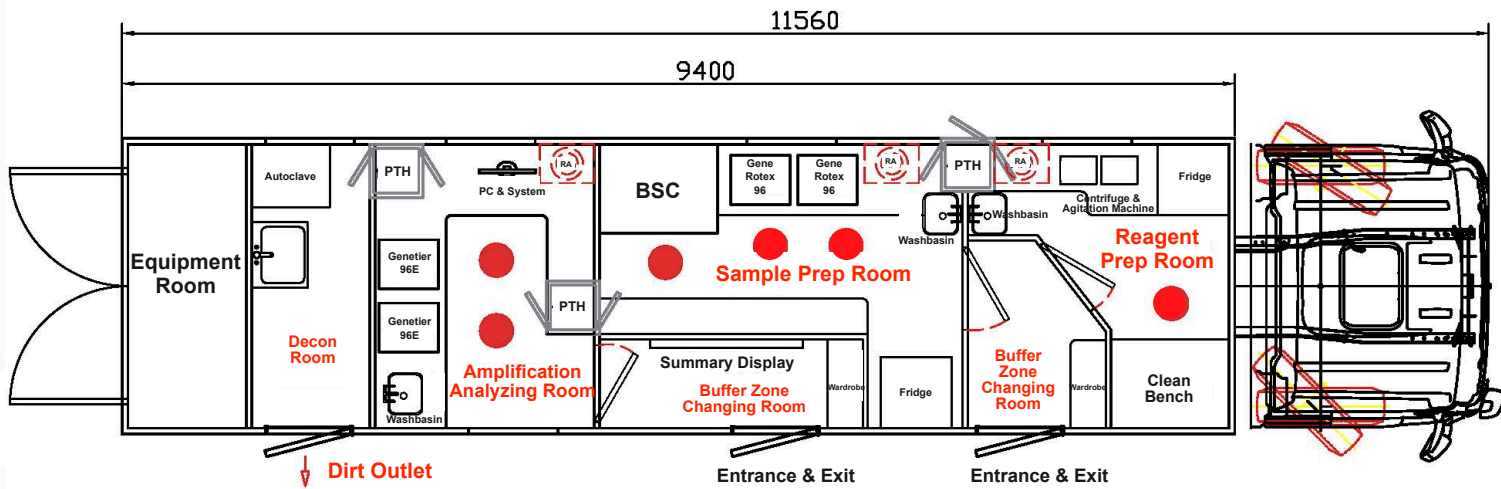
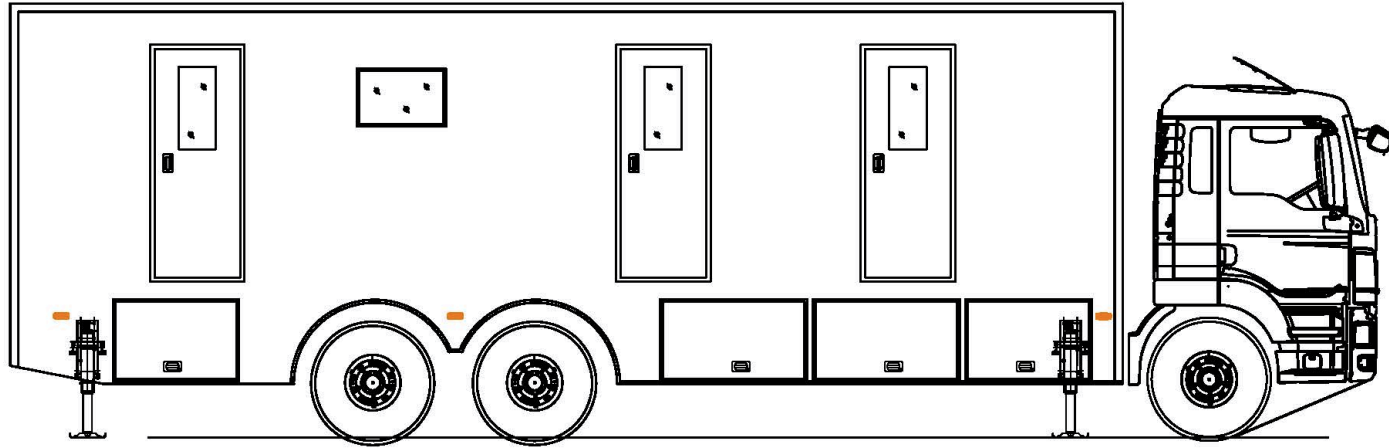


- 8~12 people working simultaneously
- Test throughput : 1500/8h~3000/24h
- Automatic testing equipment :
  - Auto sample processing system: Tianlong GeneMix 48 \* 1
  - Auto rotary nucleic acid extractor: Tianlong GeneRotex96 \* 2
  - Auto PCR analysis system: Tianlong Gentier 96E \* 3
- Operation monitoring system : OSMS



# 4 Truck Van P2+ NAT - Configuration

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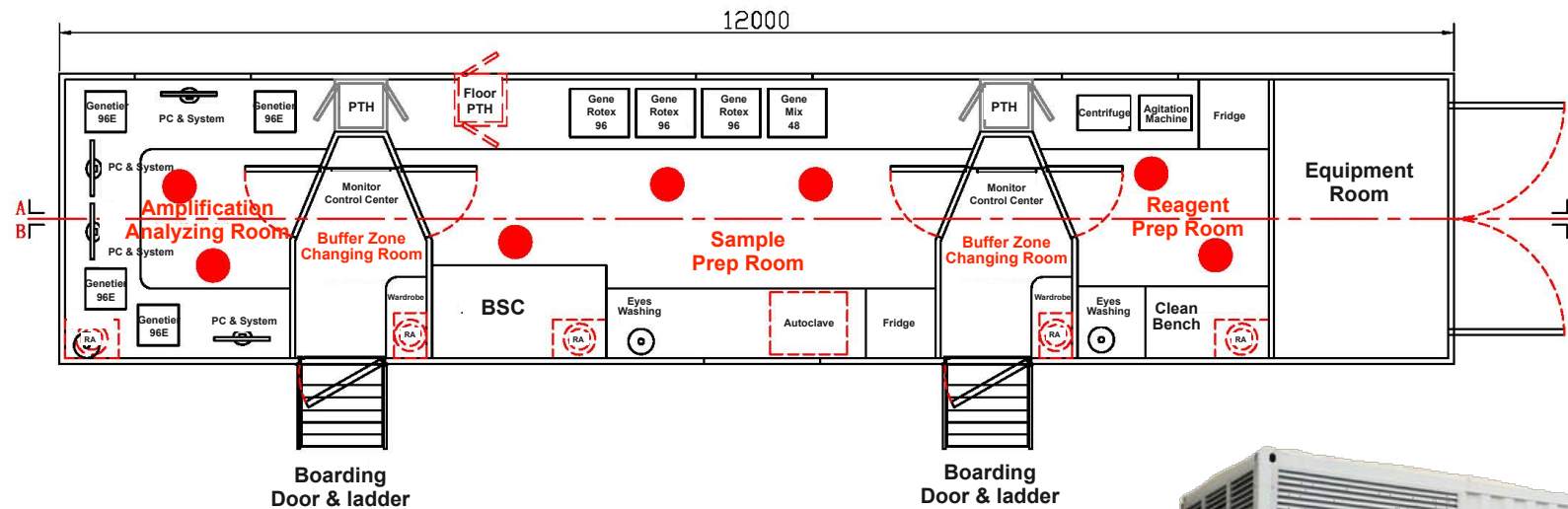
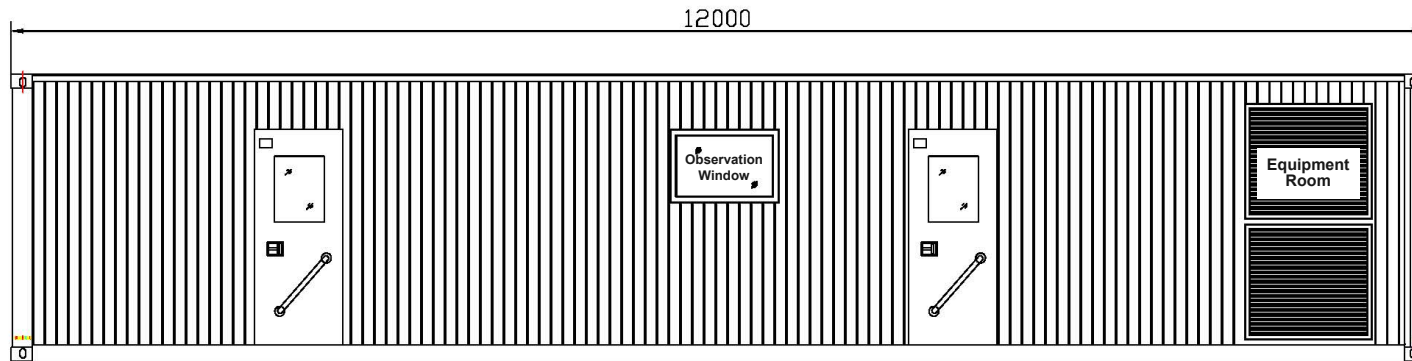
- > 6~7 people working simultaneously
- > Test throughput : 1500/8h~3000/24h
- > Automatic testing equipment :
  - Auto sample processing system: Tianlong GeneMix 48 \* 1
  - Auto rotary nucleic acid extractor: Tianlong GeneRotex96 \* 2
  - Auto PCR analysis system: Tianlong Gentier 96E \* 3
- > Operation monitoring system : OSMS



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# Shelter P2+ NAT - Configuration

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- 8~10 people working simultaneously
- Test throughput : 3000/24h
- Automatic testing equipment :
  - Auto sample processing system: Tianlong
  - GeneMix 48 \* 1
  - Auto rotary nucleic acid extractor: Tianlong
  - GeneRotex96 \* 3
  - Auto PCR analysis system: Tianlong Gentier 96E \* 4
- Operation monitoring system : OSMS



# 6 Auto COVID-19 NAT Solution

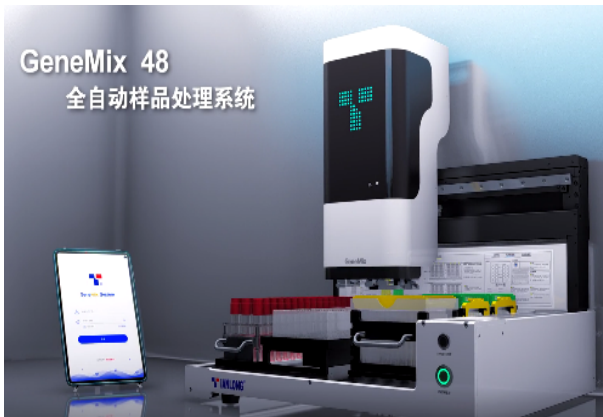
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Sample Analysis

Nucleic acid  
extraction

PCR Analysis

Analysis Report



GeneMix 48  
全自动样品处理系统

**Tianlong GeneMix 48**  
Compatible with various  
automatic sample cupping  
systems



**Tianlong GeneRotex96**  
Compatible with various  
automatic nucleic acid  
extraction instruments



**Tianlong Gentier 96E**  
Compatible with  
various PCR  
amplification analyzer



实验室管理平台

为实验室管理提供专业的信息化解决方案  
Provide professional information solution for laboratory management

**TYZLIMS**  
Compatible with lab  
information management  
system and analysis report  
output



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