

X3N-H0404

Specifications

Streamax



Datasheet applies to models:
X3 Pro-PTH 0404-2TB /
4TB -2TB BUS

Introduction

X3N-H0404 is a cost-effective device specially developed for mobile video surveillance and remote video monitoring, featuring high functional scalability. It is equipped with a high speed processor and an embedded operating system, integrating state-of-the-art H.265 video compression/decompression technologies, 3G/4G network technologies, GPS/BDS positioning technologies, and Wi Fi technology in the IT industry. It supports recordings in formats of 1080p, 720p, WD1, WHD1, WCIF, D1, HD1, and CIF. Moreover, it allows recording vehicle driving information and uploading videos remotely. It can also be used with the center software to support alarm linkage by providing central remote video surveillance, intelligent vehicle dispatching management, and playback analysis based on the central database.

It is characterized by good anti vibration performance, prevention of electromagnetic interference, radiation protection, simple design, flexible and easy installation, hard disk storage, SD card backup design, and high reliability, providing comprehensive functions. The product supports extended AI functions, implementing the Advanced Driver Assistance System (ADAS) alarm, Blind Spot Detection (BSD), and Driver Status Monitor (DSM), and effectively assists drivers to improve traffic safety and reduce pedestrian motor vehicle accidents.

Strengths

- Embedded Linux operating system
- AI function extension
- H.265/H.264 encoding and decoding to improve the memory space utilization
- 2.5-inch hard disk, hard disk heating & hard disk power off protection technologies
- Connection with storage units such as a fireproof box for disaster recovery backup
- HD VGA output

Specifications

Model

X3N H0404

Function Overview

Preview, video recording, playback, network transmission, and positioning

System

Operating System

Linux 4.9

Control Mode

CP4, mouse, EasyCheck, and network (3G/4G/Wi-Fi)

Video

Input

4-channel AHD + 4-channel IPC

Output

1-channel CVBS + 1-channel VGA

Total Resource

AHD:
4 × 720p @ 25 FPS (PAL) or
4 × 1080p @ 12 FPS (PAL) or
4 × 720p @ 30 FPS (NTSC) or
4 × 1080p @ 12 FPS (NTSC)
IPC:
4 × 1080p @ 30 FPS

Video Signal Standard

Level: 1 Vpp; impedance: 75 ohm NTSC/PAL (optional)

Audio

Input

4 channel AHD + 4 channel IPC

Output

1 channel

Audio Signal Standard

Level: 2 Vpp; input impedance: 4.7 kilohm

Display

Display Split

1/4/9-screen display

Screen Display

Positioning information, alarms, license plate numbers, driving speed, time, etc.

Operating Interface

GUI

Recording

Audio/Video

Video H.264/H.265

Compression Format

Audio ADPCM, G.711U, G.711A

Storage Temperature

-40°C - +70°C

Image Resolution

AHD:
PAL:
1080p (1920 × 1080), 720p (1280 × 720),
WD1 (928 × 576), WHD1 (928 × 288),
WCIF (464 × 288), D1 (704 × 576),
HD1 (704 × 288), CIF (352 × 288);
NTSC:
1080p (1920 × 1080), 720p (1280 × 720),
WD1 (928 × 480), WHD1 (928 × 240),
WCIF (464 × 240), D1 (704 × 480),
HD1 (704 × 240), CIF (352 × 240);
IPC:
1080p (1920 × 1080), 720p (1280 × 720);
Image Quality
Levels 1–8 adjustable (preferably Level 1)

Recording Mode	Startup/Scheduled/Alarm event recording
Alarm Prerecording	0-60 min
Alarm Recording Delay	0-30 min

Playback

Playback Channel	Local 1/4 channel playback and web based 1/4/8 channel playback
Search Mode	By date/time, channel, or event

Network

3G/4G	EVDO/TD SCDMA/WCDMA/TDD LTE/FDD LTE (optional) W217 module. Supported protocol: 802.11a/b/g/n/ac
WIFI	Supported frequency band: 2.4/5.0 GHz
Ethernet	4 × IPC 6-pin aviation plug (100 Mbit/s, PON-powered) + 1 × RJ45 (100 Mbit/s)

Positioning

GPS/BD	Positioning, speed detection, and time synchronization
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Sensor

G-Sensor	Built-in 6-axis inertial sensor
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Storage

HDD/SSD	1 × 2.5" SATA HDD or SSD, 7/9.5/15 mm thick, supporting hard disk heating
SD	Hot swapping 32/64/128/256 GB SDXC

Port

USB	1 × USB2.0(Type A)+ 1 × USB2.0(Type B)
SD	1 × SD card slot
SIM	1 × SIM card slot
Serial Port	2 × RS232, 2 × RS485(1 × R-WATCH)
CAN	1 × CAN
IO	8 channel input and 2 channel output
Pulse Speed Detection	1 channel
Control Panel	CP4\CP5
Intercom	1 × MIC port (CP4)

Power Supply

Input	DC 8~36 V
Output	5 V @ 500 mA & 12V@500 mA
Maximum Typical Power Consumption	50 W
Standby Power Consumption	≈ 0 W

Physical Characteristics

Dimensions (mm)	281 × 167 × 92.8 (with the bracket and rear shield)
Weight (kg)	2.4 kg (without hard disks)

Environment

Operating Temperature	40°C to +70°C (heated, without hard disks)
Operating Humidity	8% to 95% (non-condensing)

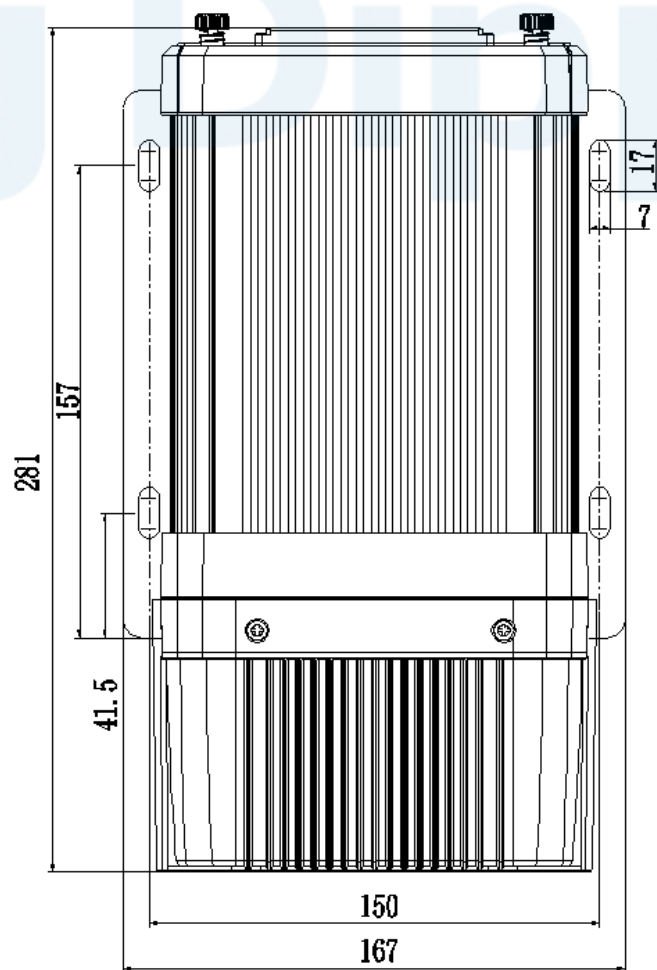
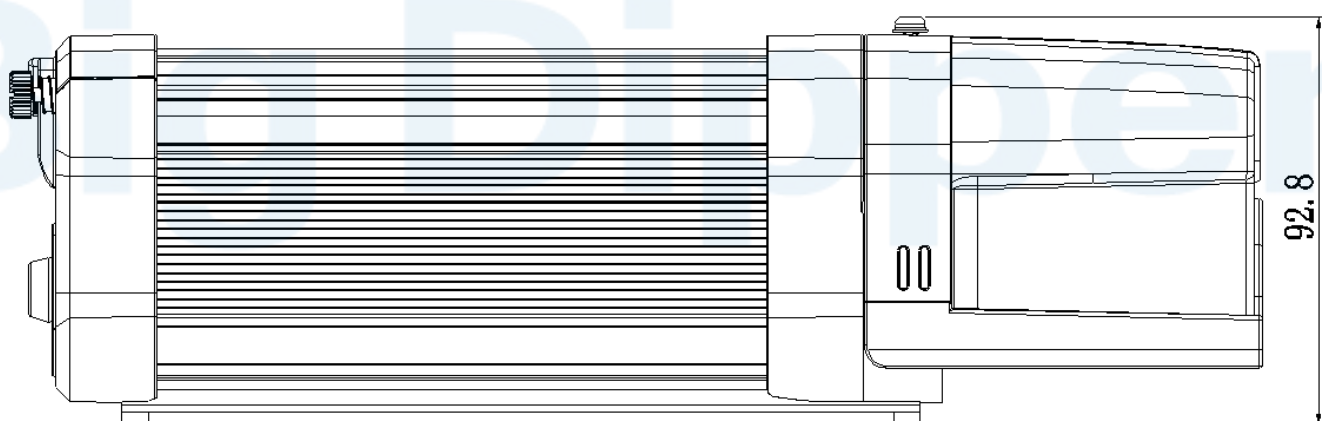
AI

MDVR AI	Streamax AHD camera CA29M (DSM) and CA20S3.0 (ADAS)
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Dimensions

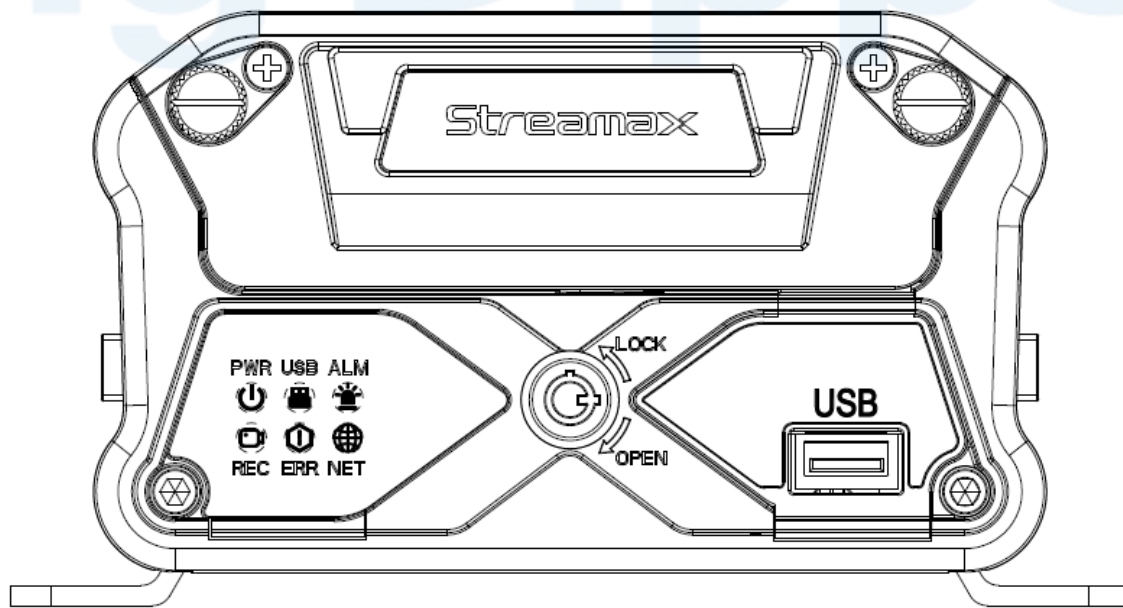
(unit: mm)

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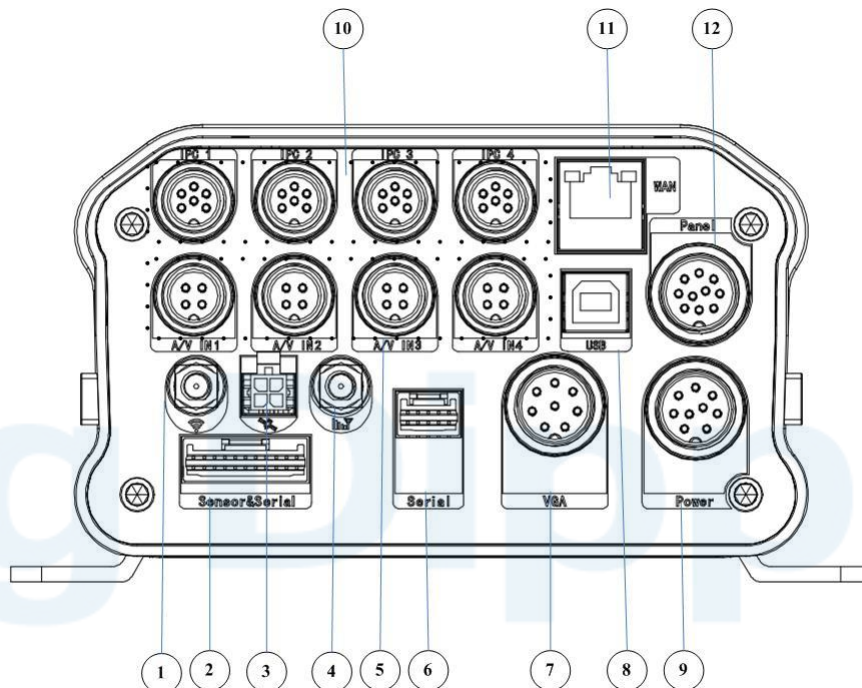


Panel Ports

Front panel



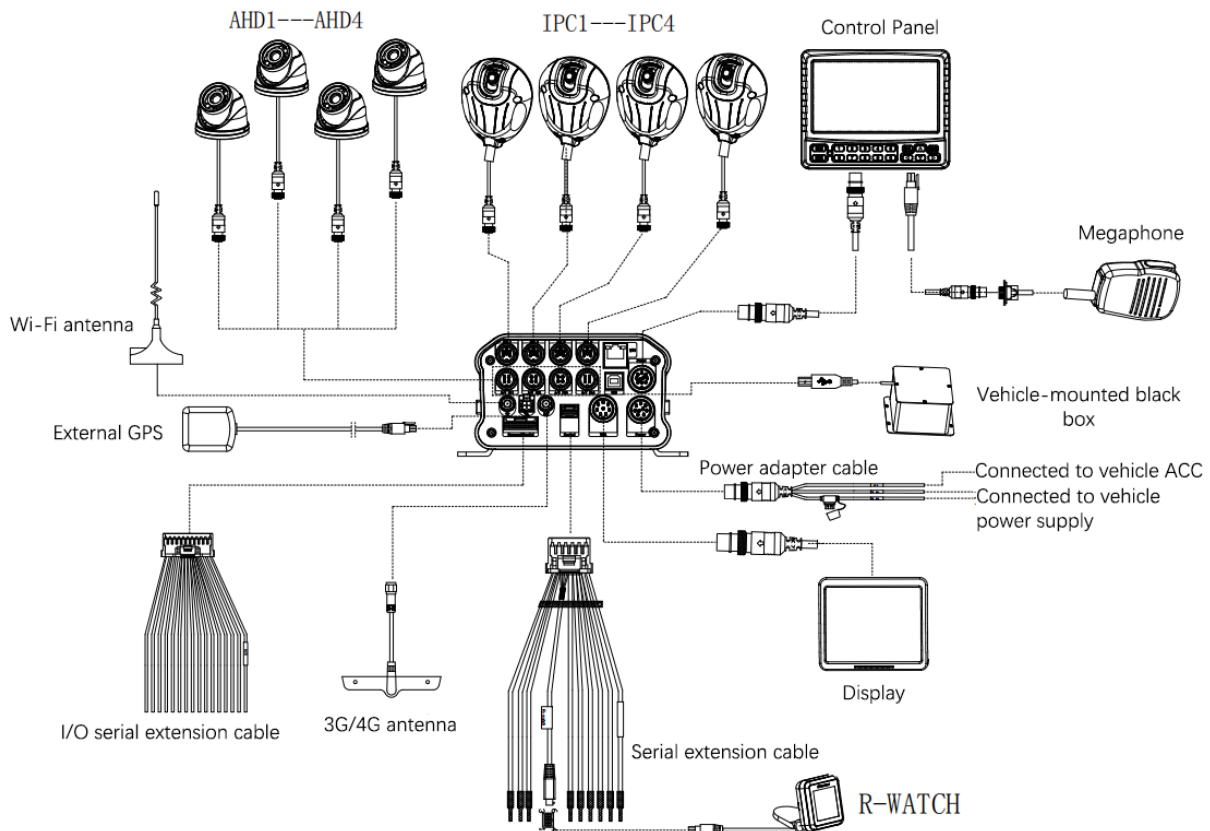
Rear panel



S/N	Silk Screen	Description
1		Wi-Fi antenna connector
2	Sensor&Serial	IO port & serial port
3		GPS/BDS antenna connector
4		3G/4G antenna connector
5	A/V IN1~4	Analog audio/video input ports 1 to 4
6	Serial	Serial port
7	VGA	VGA port
8	USB	USB 2.0 port (Type B)
9	Power	8 36 V DC power input
10	IPC1~4	IPC audio/video input ports 1 to 4
11	WAN	100 Mbit/s network port
12	Panel	CP4 port

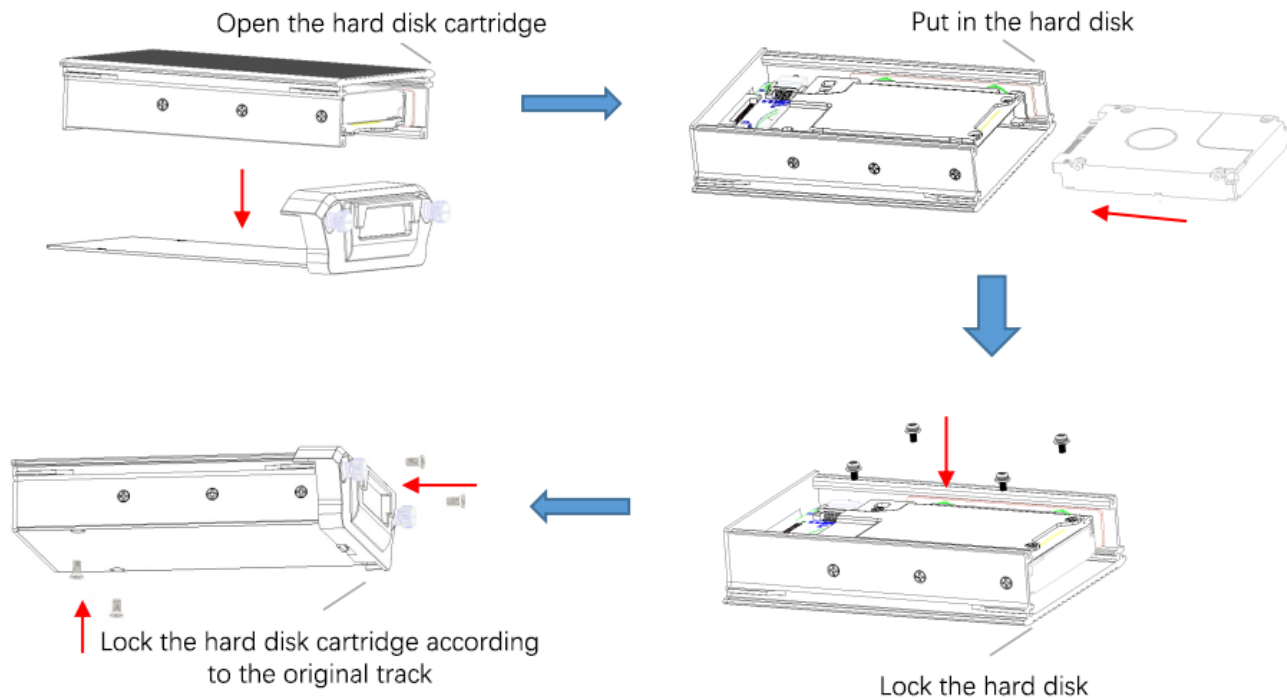
Installation

Typical Wiring Diagram



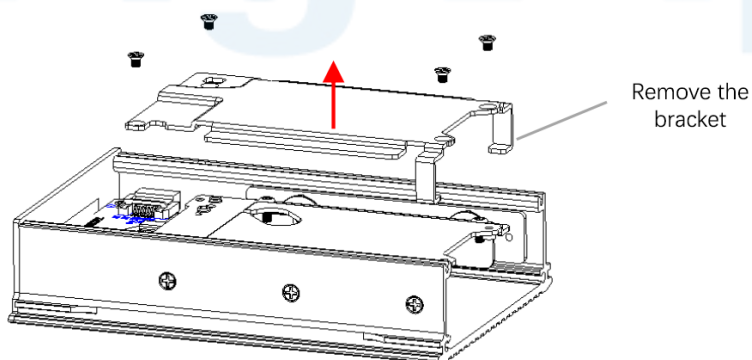
Hard Disk Installation

Installation of Hard Disks with 9.5 mm/7.0 mm Thickness



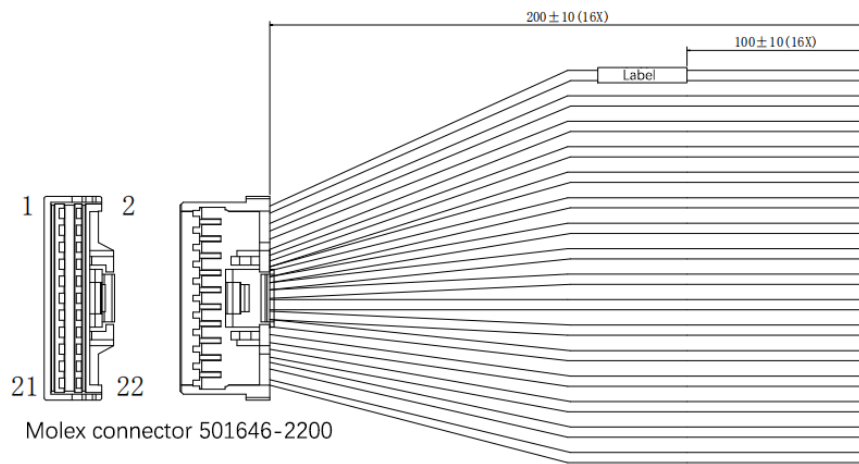
Installation of Hard Disks with 15 mm Thickness

If it is originally compatible with hard disks with 9.5 mm/7.0 mm thickness, and a hard disk with 15 mm thickness is to be installed, you need to remove the mounting bracket before installing.



External Cable Connector Pinouts

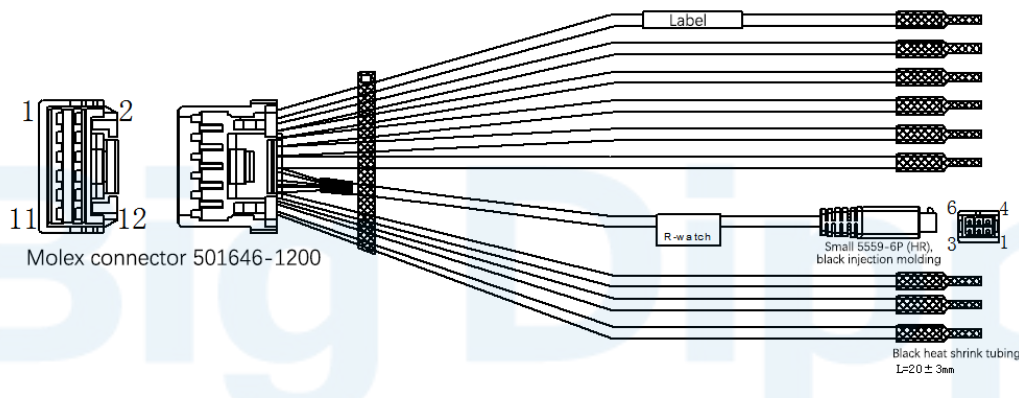
Alarm and serial cable connector pinout



Pinout

501646-2200	Label content
1	Red SENSOR IN1
3	Gray SENSOR IN2
5	Light green SENSOR IN3
7	Light blue SENSOR IN4
9	Gray SENSOR IN5
11	Orange SENSOR IN6
13	Blue/Black SENSOR IN7
15	Blue/White SENSOR IN8
17	Blue SPEED IN
12	Red/White SENSOR OUT1
14	Red/Yellow SENSOR OUT2
19	Black GND
21	Red +5V
18	Black GND
10	Green 232RX-1
8	White 232TX-1

Serial cable connector pinout



Pinout

501646-1200	Label content
1	White/Yellow 232TX-2
2	Green/Yellow 232RX-2
3	White/Black CAN-H
4	Green/Black CAN-L
5	Red +5V
6	Black GND
8	Red +12V
7	Black 3 GND
8	Red 6 +12V
9	White 4 485A-1
10	Yellow 5 485B-1
11	White/Blue 485A-2
12	Green/Blue 485B-2