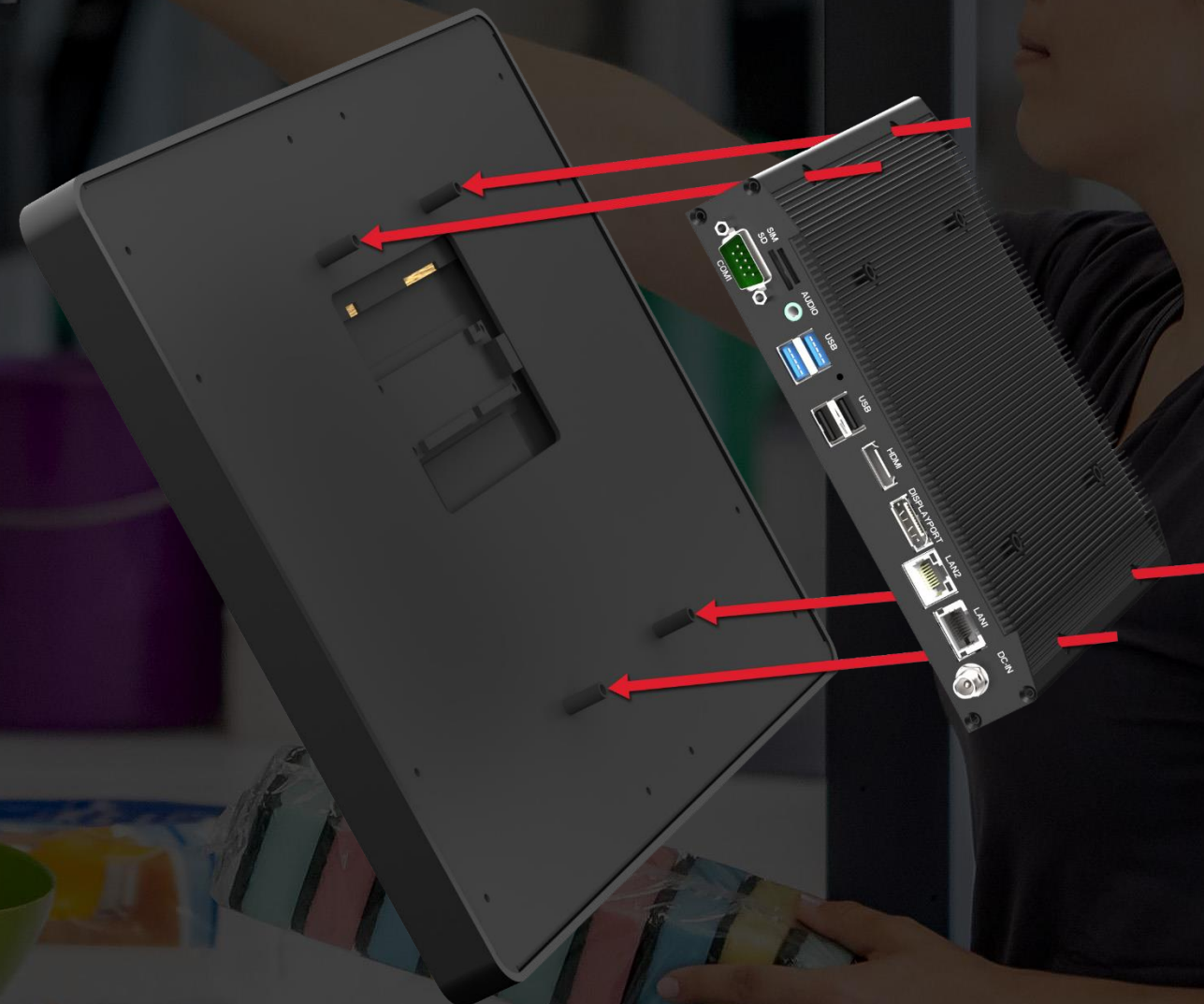
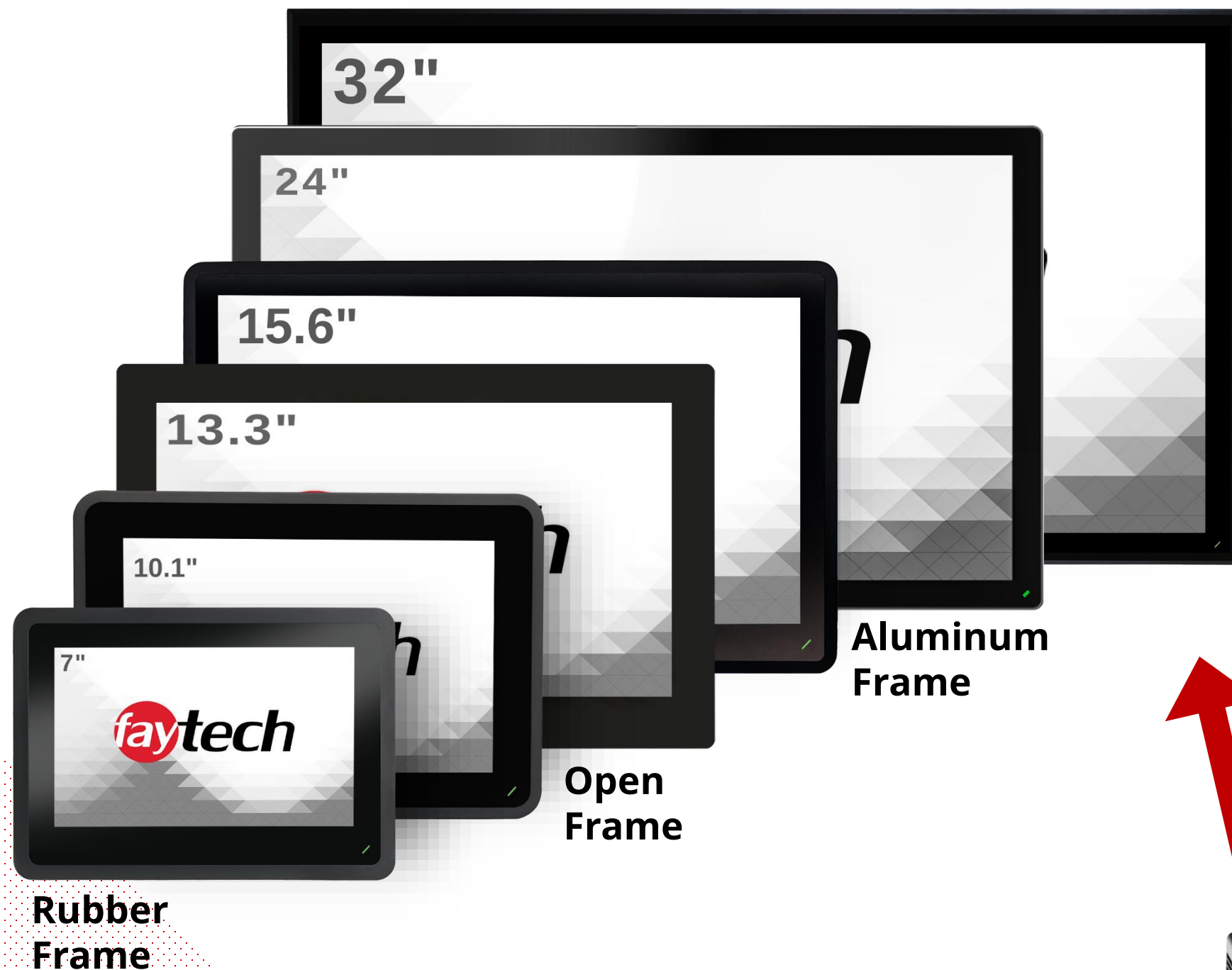


# Modular front & back kit Solutions



# faytech's Modular Front & Back Kits



## Embedded Amlogic IPCs

A311D / S905D3



## Intel®-Based IPCs

Elkhart Lake: x6413E, x6211E, J6412

Tiger Lake U: i3-1115G4E, i5-1145G7E, i7-1185G7E

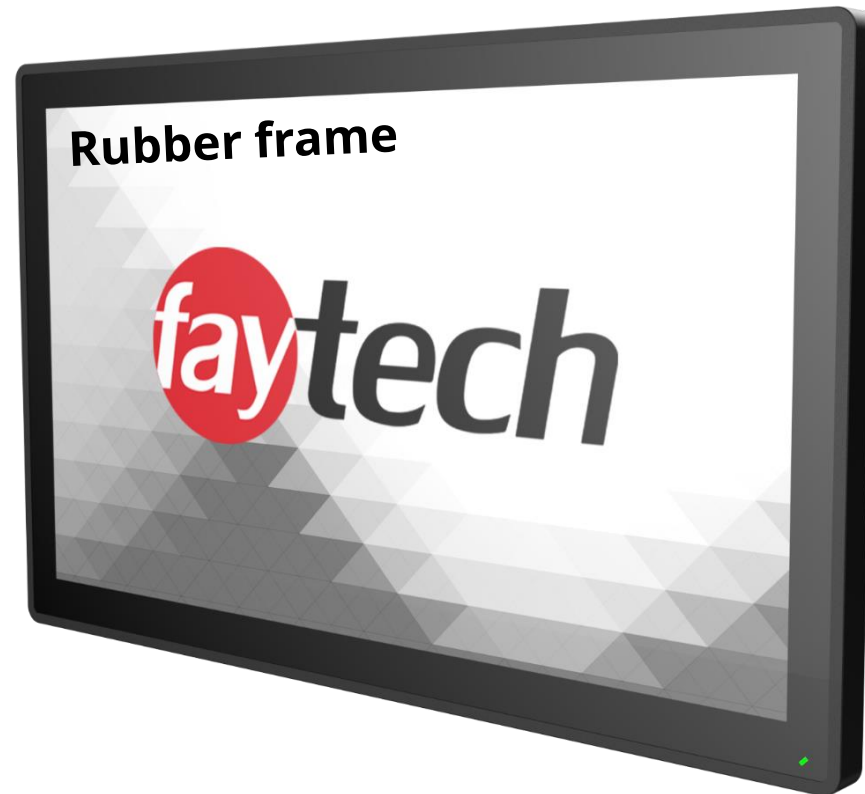


## Monitor back-kits

RT2556



# faytech's Front Kits

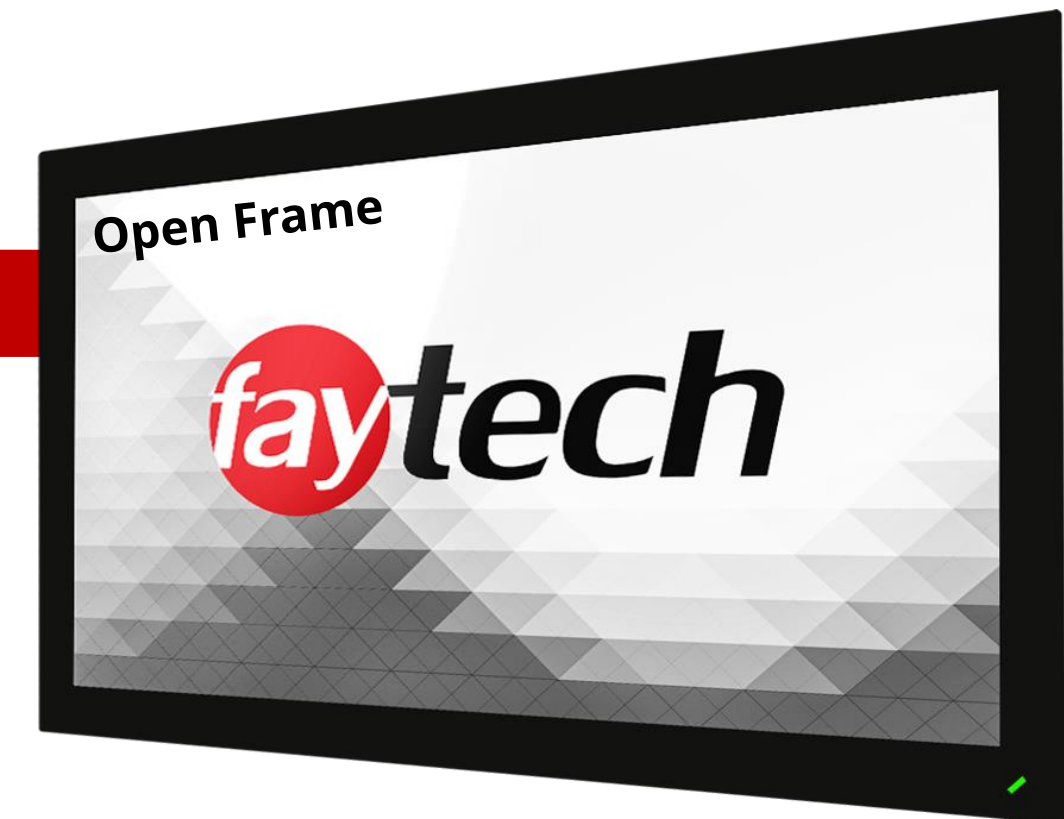


## Rubber Frame Front

- IP65 front feature
- For harsh & rugged environments
- Perfect for integration into machines

## Open Frame Front

- Easy integration into machinery
- High brightness display
- Lightweight aluminum



## Aluminum Front

- Perfect as indoor solution
- Modern high-quality aluminum frame
- Cost-effective front kit

# faytech's Front kits (Rubber Frame & Aluminum)

	7"	8"	10"	10.1"	12.1"	13.3"	15"	15.6"	17"	19"	21.5"	24"	27"	32"
<b>Display Size</b>	7.0	8.0	9.7	10.1	12.1	13.3	15	15.6	17.0	19.0	21.5	24.0	27.0	32.0
<b>Aspect Ratio</b>	16 : 9	4 : 3	4 : 3	16:10	4 : 3	16 : 9	4 : 3	16 : 9	5 : 4	4:3	16 : 9	16 : 9	16 : 9	16 : 9
<b>Resolution</b>	1024 × 600	1024 × 768	1024 × 768	1280 × 800	1024 × 768	1920 × 1080	1024 × 768	1920 × 1080	1280 × 1024	1280 × 1024	1920 × 1080	1920 × 1080	1920 × 1080	1920 × 1080
<b>Active Area [mm]</b>	154.21 × 85.92	162.05 × 121.54	196.61 × 147.46	216.96 × 135.60	245.76 × 184.32	293.76 × 165.24	304.1 × 228.1	344.16 × 193.59	337.92 × 270.34	374.784 × 299.8272	476.064 × 267.786	597.6 × 336.15	597.6 × 336.15	698.4 × 392.85
<b>Brightness [cd/m²]</b>	500	350	300	350	500	300	420	220	250	250	250	300	300	500
<b>Contrast Ratio</b>	800 : 1	800 : 1	800:1	800 : 1	700 : 1	800 : 1	800 : 1	800 : 1	1000 : 1	1000 : 1	1000 : 1	3000 : 1	3000 : 1	4000 : 1
<b>LED Life-time [h]</b>	20000	20000	20000	30000	50000	15000	30000	15000	30000	30000	30000	30000	30000	50000
<b>Viewing Angle [°]</b>	150 / 145	170/170	170/170	170 / 170	160 / 160	170 / 170	160 / 160	170 / 170	170 / 160	178/178	178/ 178	178 / 178	178 / 178	178 / 178
<b>Display Interface</b>	LVDS	LVDS	LVDS	LVDS	LVDS	eDP	LVDS	eDP	LVDS	LVDS	LVDS	LVDS	LVDS	LVDS
<b>Dimensions L x W [mm]</b>	195.6 × 137.6	201.0 × 160.5	244.9 × 195.8	278.0 × 203.6	301.0 × 246.0	338.2 × 220.7	359.0 × 291.0	389.3 × 246.8	393.0 × 333.0	431.5 × 364.5	532.0 × 331.0	579.4 × 347.0	663.0 × 405.0	768.0 × 475.0
<b>No. of Clamp supports</b>	N/A	N/A	4	4	6	4	6	4	6	6	6	7	10	N/A
<b>Front Kit Panel Consumption [W]</b>	3.303	TBD	TBD	3.5	8.609	3.8	8.8	4.58	7.5	14.216	18.49	20.98	TBD	TBD

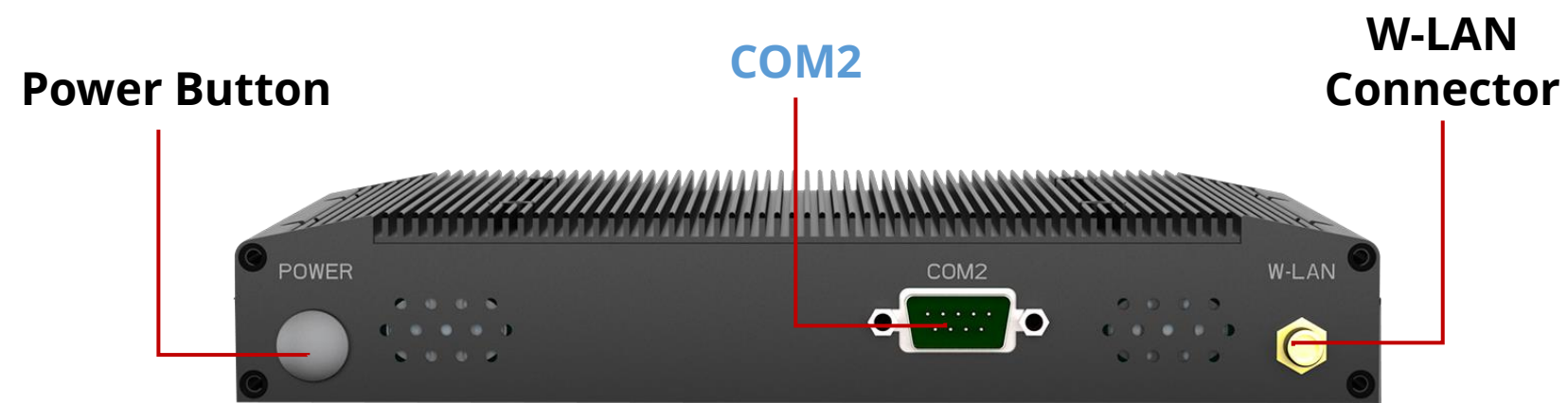
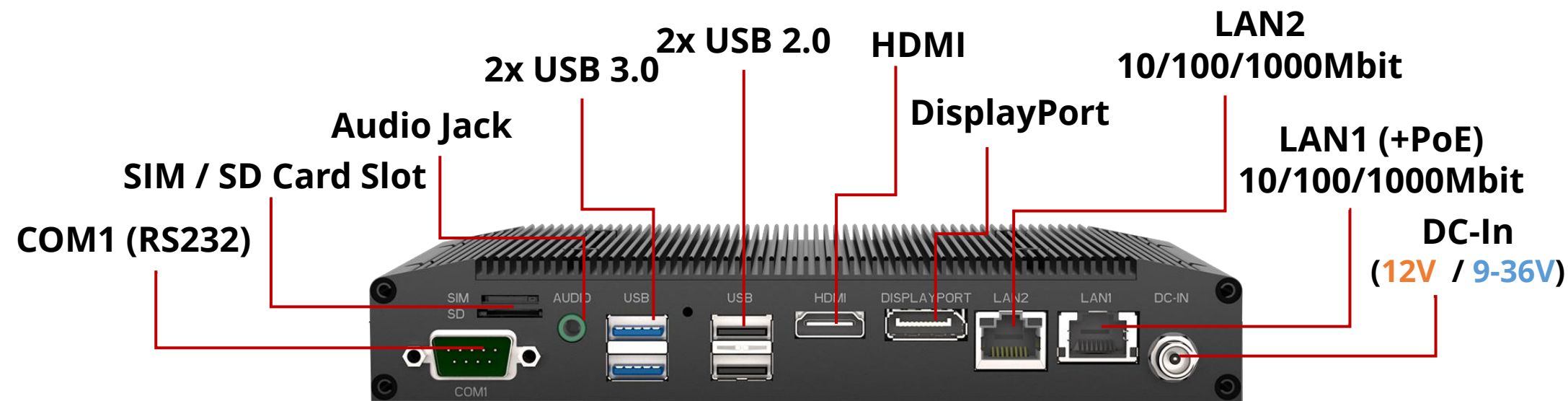
# faytech's Front kits (Open Frame)

	7"	8"	10"	10.1"	12.1"	13.3"	15"	15.6"	17"	19"	21.5"	24"	27"	32"
<b>Display Size</b>	7.0	8.0	9.7	10.1	12.1	13.3	15	15.6	17.0	19.0	21.5	24.0	27.0	32.0
<b>Aspect Ratio</b>	16 : 9	4 : 3	4 : 3	16:10	4 : 3	16 : 9	4 : 3	16 : 9	5 : 4	4:3	16 : 9	16 : 9	16 : 9	16 : 9
<b>Resolution</b>	1024 × 600	1024 × 768	1024 × 768	1280 × 800	1024 × 768	1920 × 1080	1024 × 768	1920 × 1080	1280 × 1024	1280 × 1024	1920 × 1080	1920 × 1080	1920 × 1080	1920 × 1080
<b>Active Area [mm]</b>	154.21 × 85.92	162.05 × 121.54	196.61 × 147.46	216.96 × 135.60	245.76 × 184.32	293.76 × 165.24	304.1 × 228.1	344.16 × 193.59	337.92 × 270.34	374.784 × 299.8272	476.064 × 267.786	597.6 × 336.15	597.6 × 336.15	698.4 × 392.85
<b>Brightness [cd/m<sup>2</sup>]</b>	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
<b>Contrast Ratio</b>	800 : 1	800 : 1	800:1	800 : 1	700 : 1	800 : 1	800 : 1	800 : 1	1000 : 1	1000 : 1	1000 : 1	3000 : 1	3000 : 1	4000 : 1
<b>LED Life-time [h]</b>	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
<b>Viewing Angle [°]</b>	150 / 145	170/170	170/170	170 / 170	160 / 160	170 / 170	160 / 160	170 / 170	170 / 160	178/178	178/ 178	178 / 178	178 / 178	178 / 178
<b>Display Interface</b>	LVDS	LVDS	LVDS	LVDS	LVDS	eDP	LVDS	eDP	LVDS	LVDS	LVDS	LVDS	LVDS	LVDS
<b>Dimensions L x W [mm]</b>	195.6 × 137.6	201.0 × 160.5	244.9 × 195.8	278.0 × 203.6	301.0 × 246.0	338.2 × 220.7	359.0 × 291.0	389.3 × 246.8	393.0 × 333.0	431.5 × 364.5	532.0 × 331.0	579.4 × 347.0	663.0 × 405.0	768.0 × 475.0
<b>No. of Clamp supports</b>	N/A	N/A	4	4	6	4	6	4	6	6	6	7	10	N/A
<b>Front Kit Panel Consumption [W]</b>	3.303	TBD	TBD	3.5	8.609	3.8	8.8	4.58	7.5	14.216	18.49	20.98	TBD	TBD

# faytech's Back kits (IPC & Monitors)

	Elkhart Lake			Tiger Lake U			Embedded Amlogic		Monitor
	x6413E	x6211E	J6412	i3-1115G4E	i5-1145G7E	i7-1185G7E	A311D	S905D3	RT2556
<b>CPU / Chipset / Board</b>	Intel® Atom® x6413E	Intel® Atom® x6211E	Intel® Celeron® J6412	Intel® Core™ i3-1115G4E	Intel® Core™ i5-1145G7E	Intel® Core™ i7-1185G7E	4-Core Cortex-A73 + Dual-core Cortex-A53	Quad-Core Cortex A-53	RTD2556T
<b>Total Cores</b>	4	2	4	2	4	4	6	4	
<b>Memory</b>	8GB	4GB	4GB	8GB	8GB	16GB	4GB - LPDDR4	2GB - LPDDR4	
<b>Storage</b>	120GB SSD	120GB SSD	120GB SSD	120GB SSD	240GB SSD	240GB SSD	64GB - eMMC 5.1	64GB - eMMC 5.1	
<b>Burst Frequency</b>	3.00 GHz	3.00 GHz	2.60 GHz	4.10 GHz (max turbo)	4.10 GHz (max turbo)	4.40 GHz (max turbo)	N/A		N/A
<b>Base Frequency</b>	1.50 GHz	1.30 GHz	2.00 GHz	2.20 GHz	1.50 GHz	1.80 GHz			
<b>Cache</b>	1.5MB L2	1.5MB L2	1.5MB L2	6MB (Smart Cache)	8MB (Smart Cache)	12MB (Smart Cache)			
<b>TPM (Intel) / NPU (Embedded)</b>	INFINEON 9672VU2.0 TPM 2.0			INFINEON 9672VU2.0 TPM 2.0			5.0 TOPS	1.2 TOPS	
<b>GPU</b>	Intel® UHD Graphics			Intel® UHD Graphics	Intel® Iris® Xe Graphics		Mali G52 MP4	Mali G31 MP2	
<b>Supported OS</b>	Debian 12 / Win 10/11, Linux Ubuntu			Debian 12 / Win 10/11, Linux Ubuntu			Android 9 / Linux+QT / Debian 12		
<b>TDP / Consumption</b>	9 W	6 W	10 W	15 W	15 W	15 W	5 W	5 W	1W
<b>Audio</b>	Realtek® ALC897 Audio CODEC			Realtek® ALC897 Audio CODEC			6MAX98090 audio chip		Integrated speakers (2x2w)
<b>Case Sizes</b>	Small & Large			Small & Large			Small & Large		Small

# faytech's Back kits: Elkhart Lake



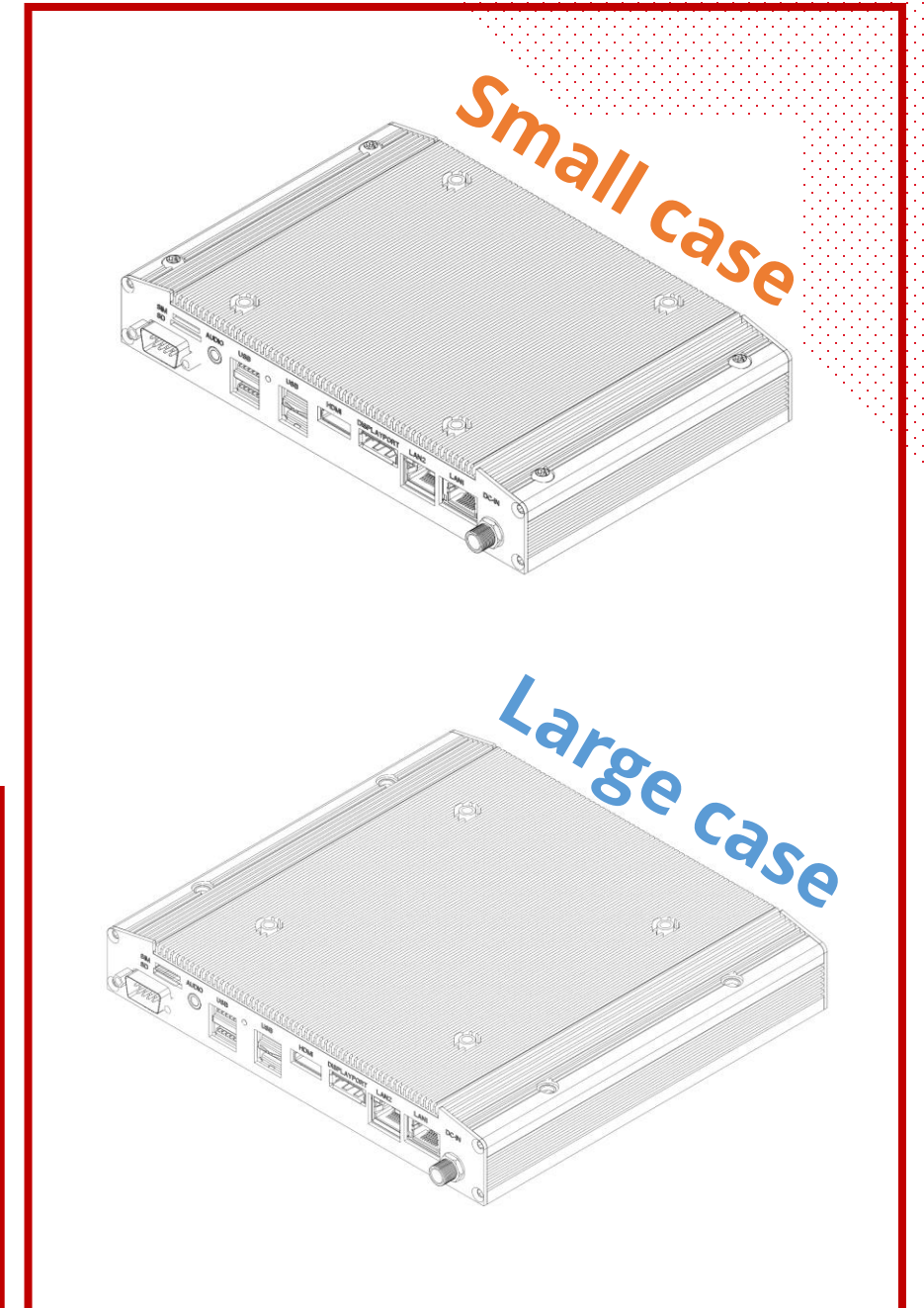
**OS Support**



Windows 10/11



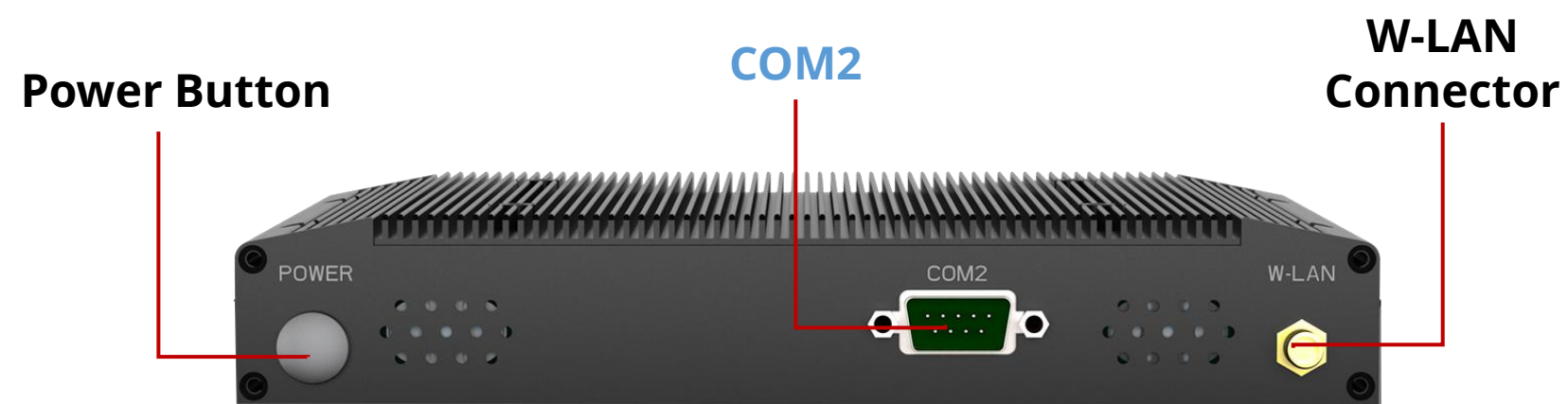
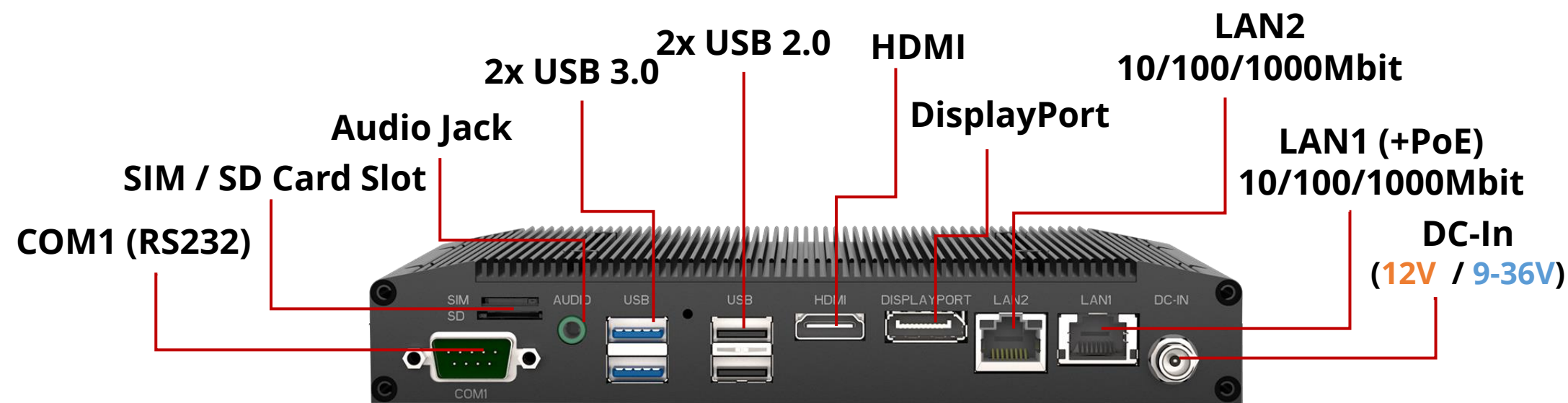
Linux Ubuntu



	CPU	OS	Storage	Front-kit fit	Housing size	Connectors
<b>Small case version</b>	Intel® x6413E Intel® x6211E	Debian 12 Windows 10/11	4-8GB RAM	7-32"	190 x 126.2 x 32mm	COM1, 2xUSB 2.0, 2xUSB 3.0, HDMI, DisplayPort, LAN1, LAN 2, DC-In (12V), Audio Jack, SIM / SD Card, W-LAN, Power button
<b>Large case version</b>	Intel® J6412	Linux Ubuntu	120GB SSD	10-32"	190 x 173.2 x 32mm	COM1, COM2, 2xUSB 2.0, 2xUSB 3.0, HDMI, DisplayPort, LAN1, LAN 2, DC-In (9-36V), Audio Jack, SIM / SD Card, W-LAN, Power button

\*all units have VESA100 mounting holes

# faytech's Back kits: Tiger Lake U



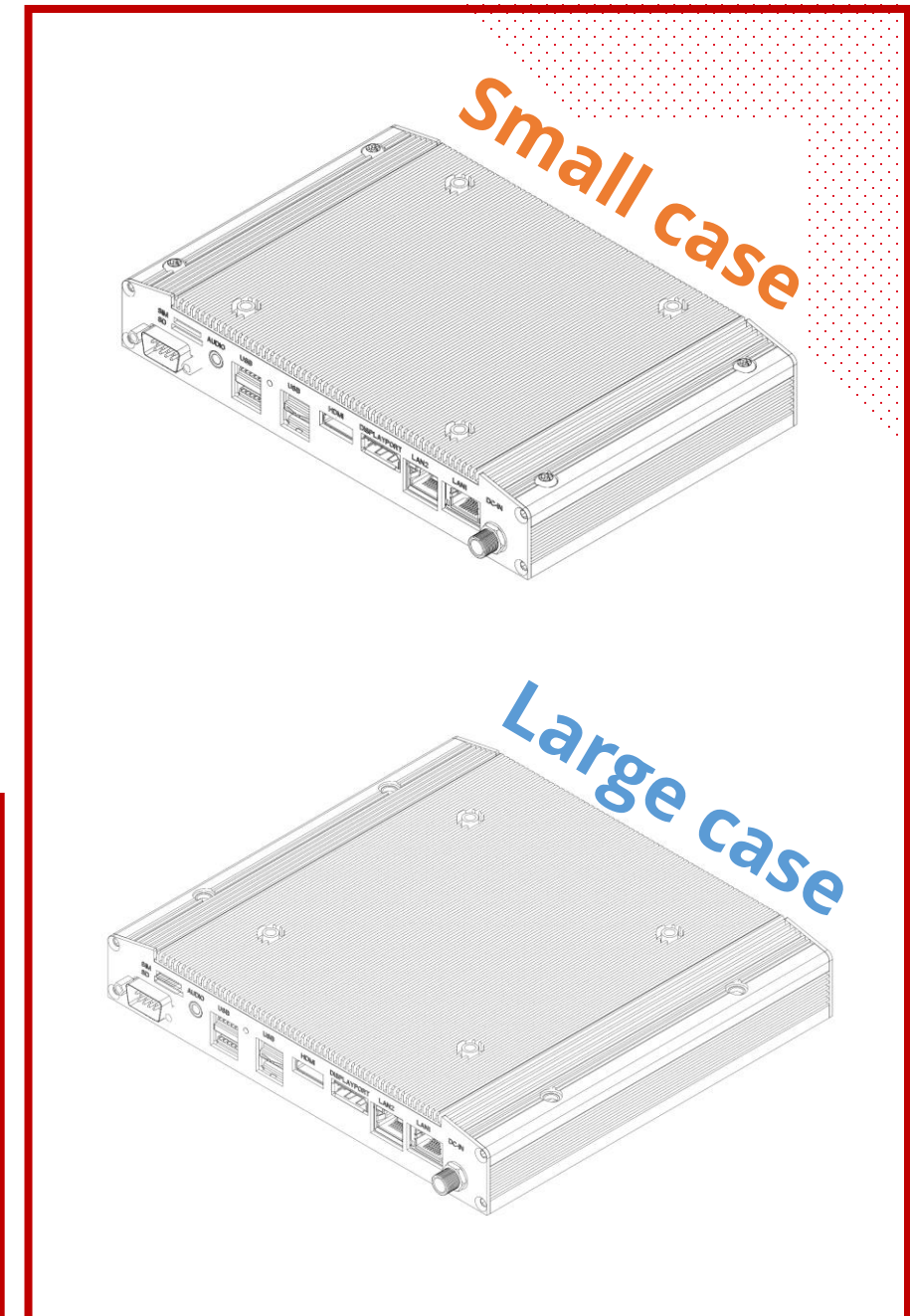
### OS Support



Windows  
10/11



Linux  
Ubuntu

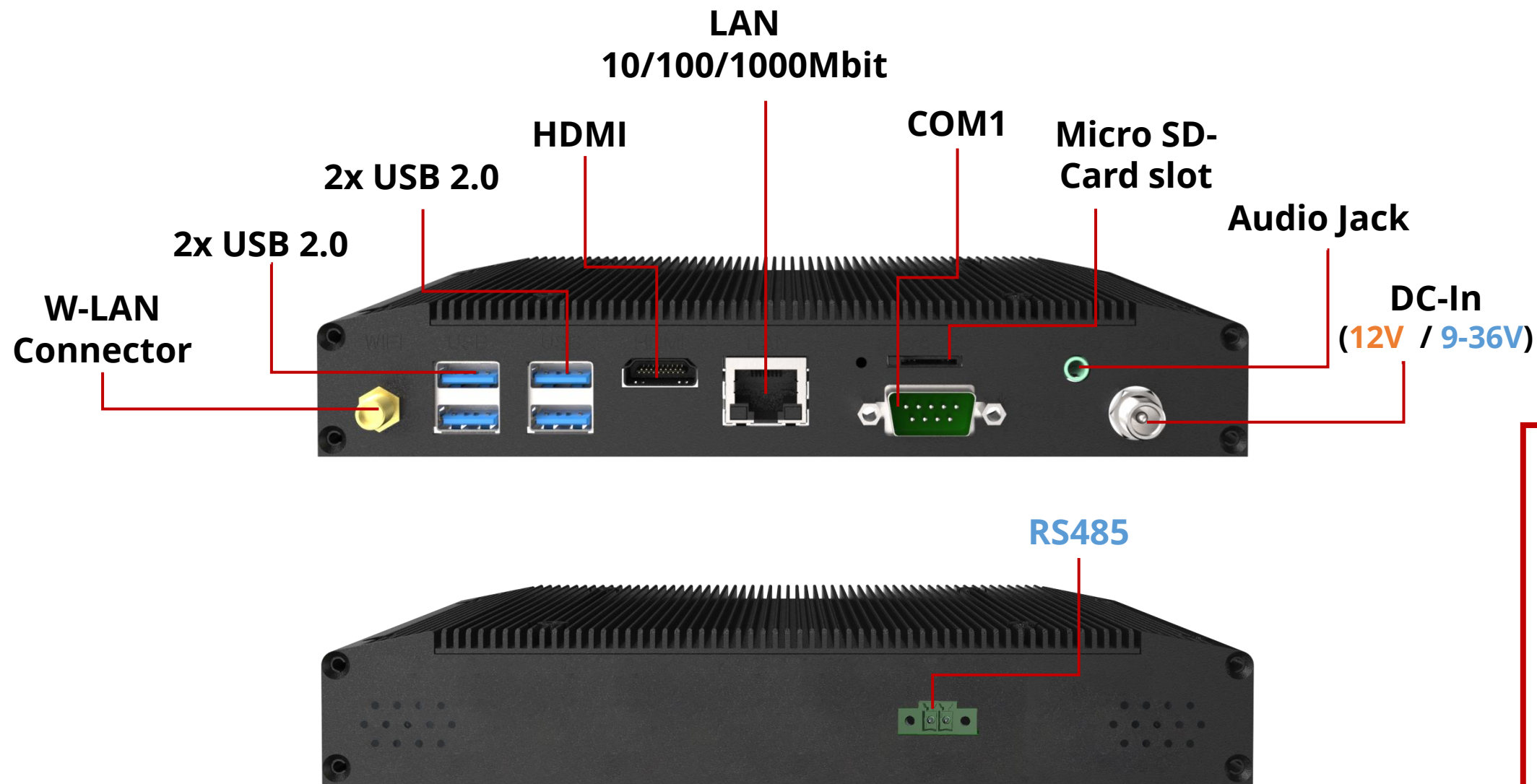


	CPU	OS	Storage	Front-kit fit	Housing size	Connectors
<b>Small case version</b>	Intel® Core™ i3-1115G4E	Debian 12 Windows 10/11	8GB RAM 16GB RAM	7-32"	190 x 126.2 x 32mm	COM1, 2xUSB 2.0, 2xUSB 3.0, HDMI, DisplayPort, LAN1, LAN 2, DC-In (12V), Audio Jack, SIM / SD Card, W-LAN, Power button
<b>Large case version</b>	i5-1145G7E i7-1185G7E	Linux Ubuntu	120GB SSD 240GB SSD	10-32"	190 x 173.2 x 32mm	COM1, COM2, 2xUSB 2.0, 2xUSB 3.0, HDMI, DisplayPort, LAN1, LAN 2, DC-In (9-36V), Audio Jack, SIM / SD Card, W-LAN, Power button

\*all units have VESA100 mounting holes



# faytech's Back kits: Amlogic A311D (Premium)



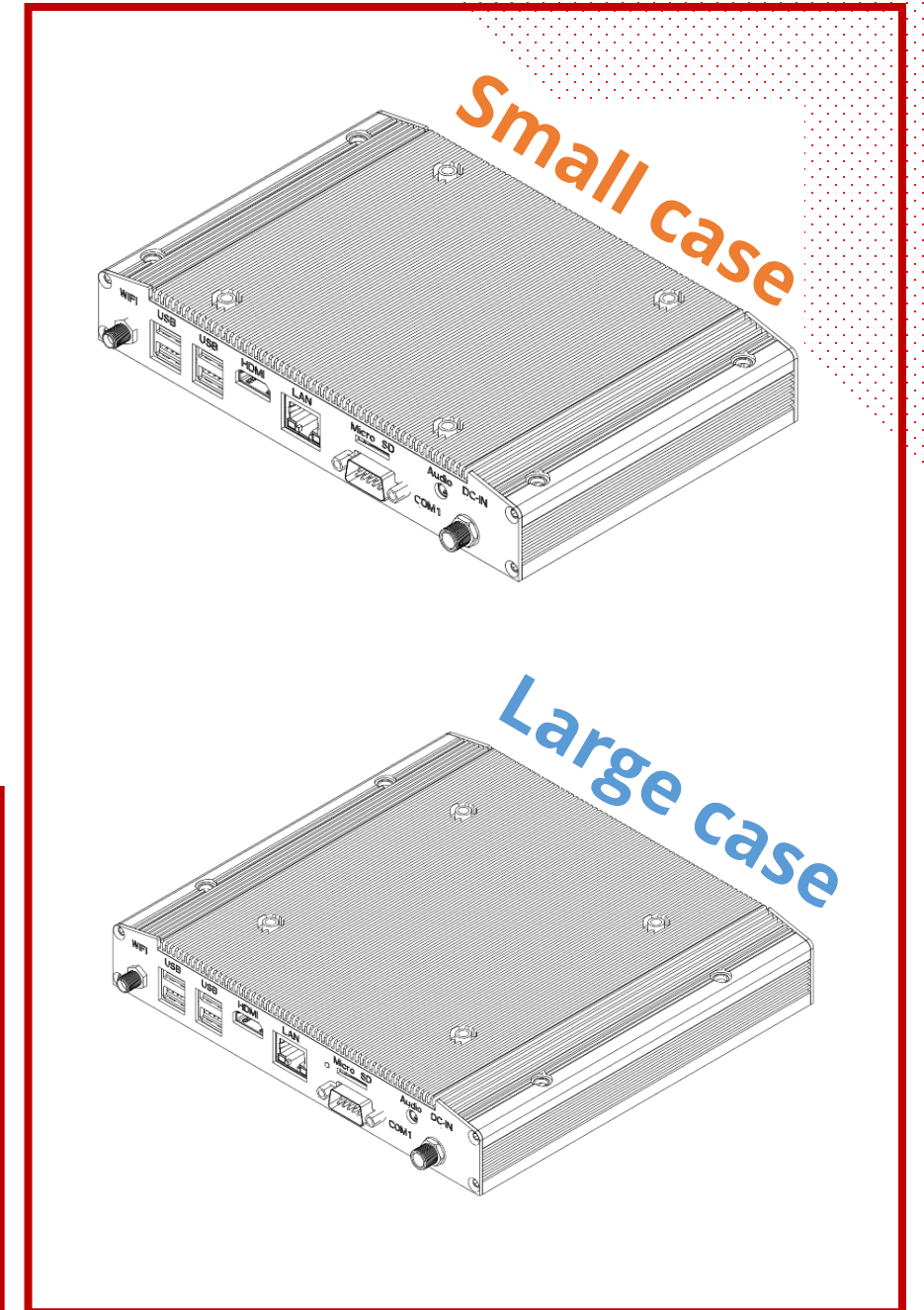
### OS Support



Android 9



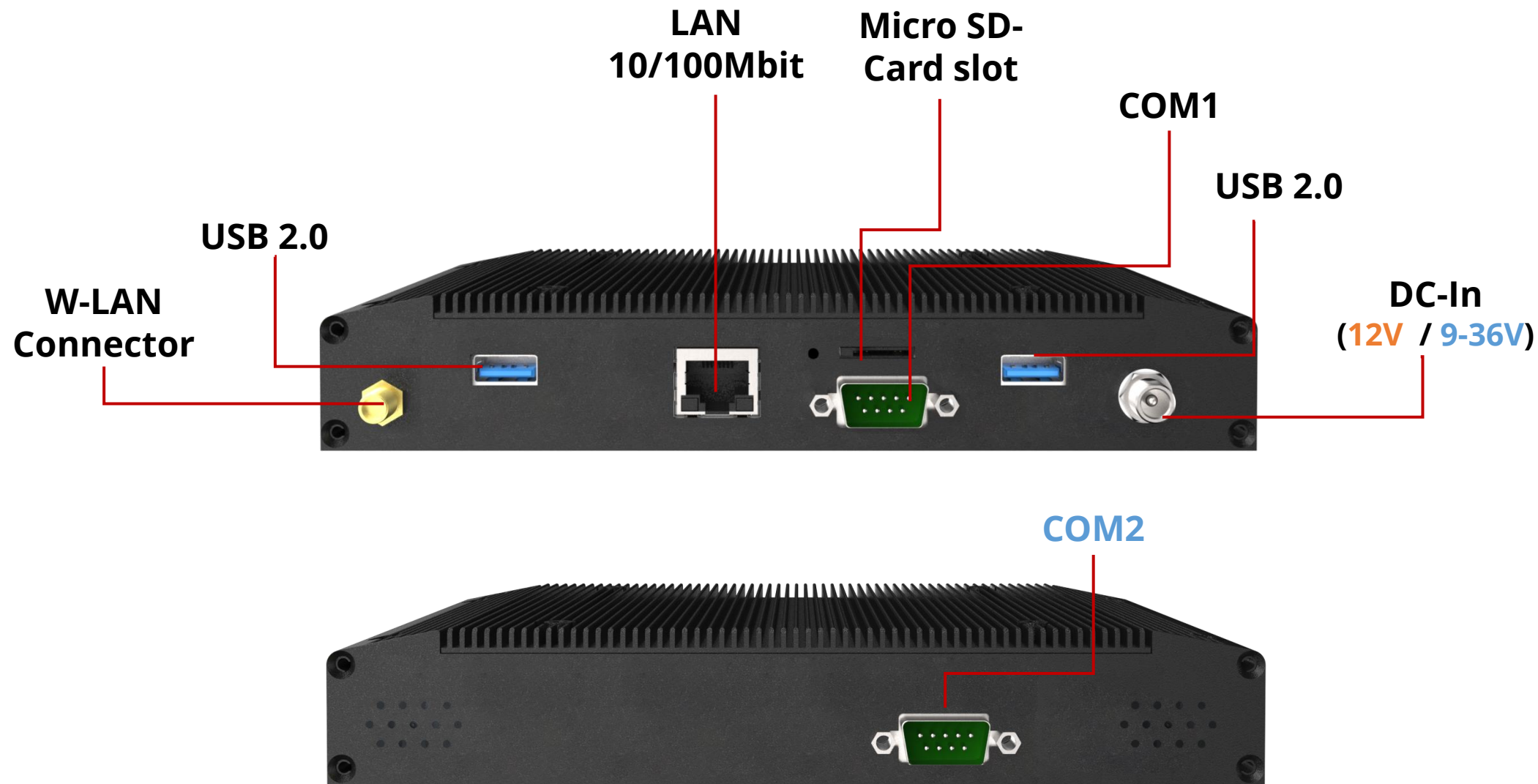
Linux +QT



	CPU	OS	Storage	Front-kit fit	Housing size	Connectors
<b>Small case version</b>	<b>A311D</b> Quad-Core Cortex A73 + Dual-Core Cortex A53	Android 9	4GB RAM	7-32"	190 x 126.2 x 32mm	COM1, 4xUSB 2.0, HDMI, LAN, Micro-SD card slot, Audio Jack, W-LAN connector, <b>DC-In (12V)</b>
<b>Large case version</b>		Linux + QT	64GB eMMC	10-32"	190 x 173.2 x 32mm	COM1, 4xUSB 2.0, HDMI, LAN, Micro-SD card slot, Audio Jack, W-LAN connector, <b>DC-IN (9-36V)</b> , <b>RS485</b>
		Debian 12				

\*all units have VESA100 mounting holes

# faytech's Back kits: Amlogic S905D3 (Basic)



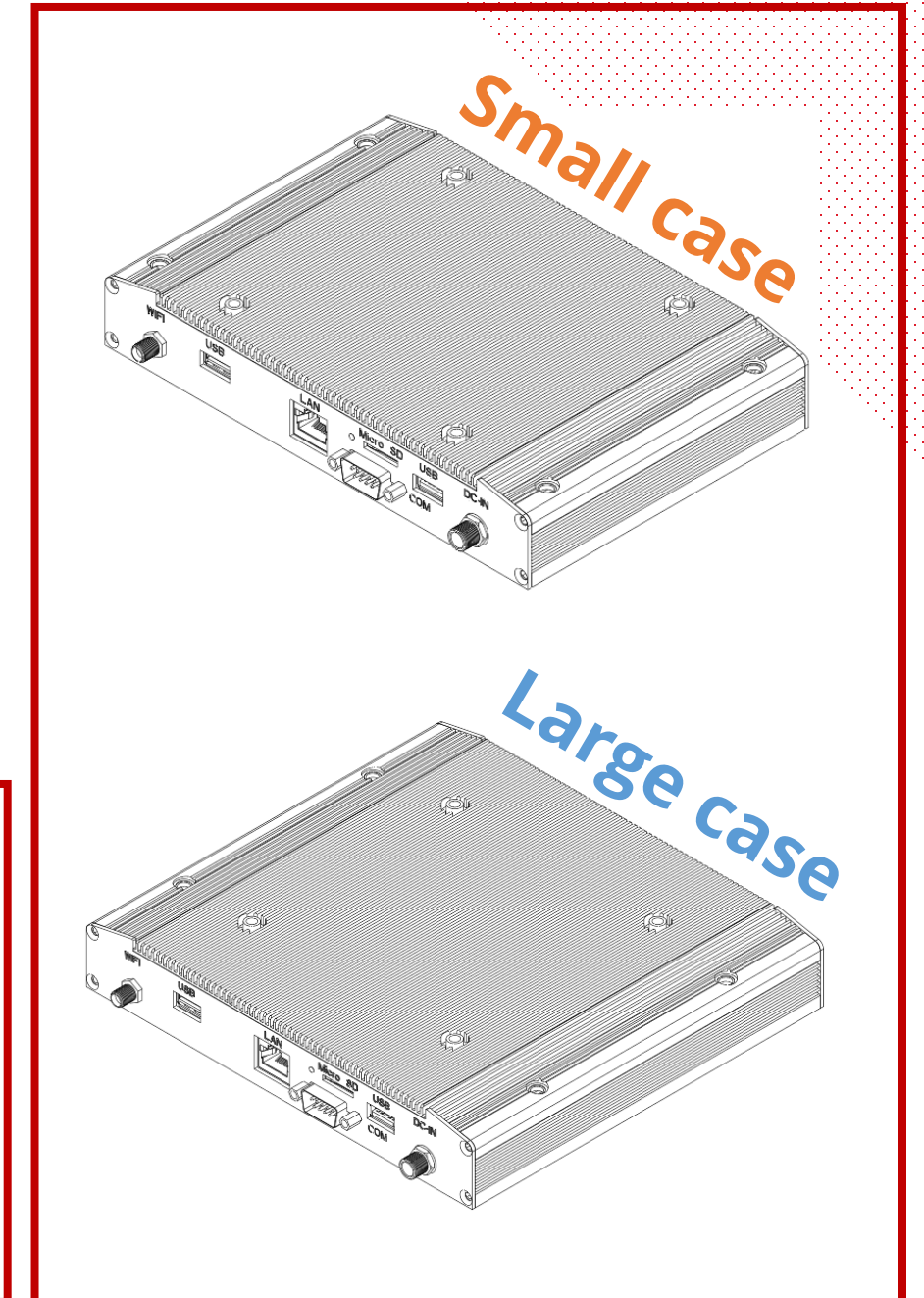
**OS Support**



Android 9



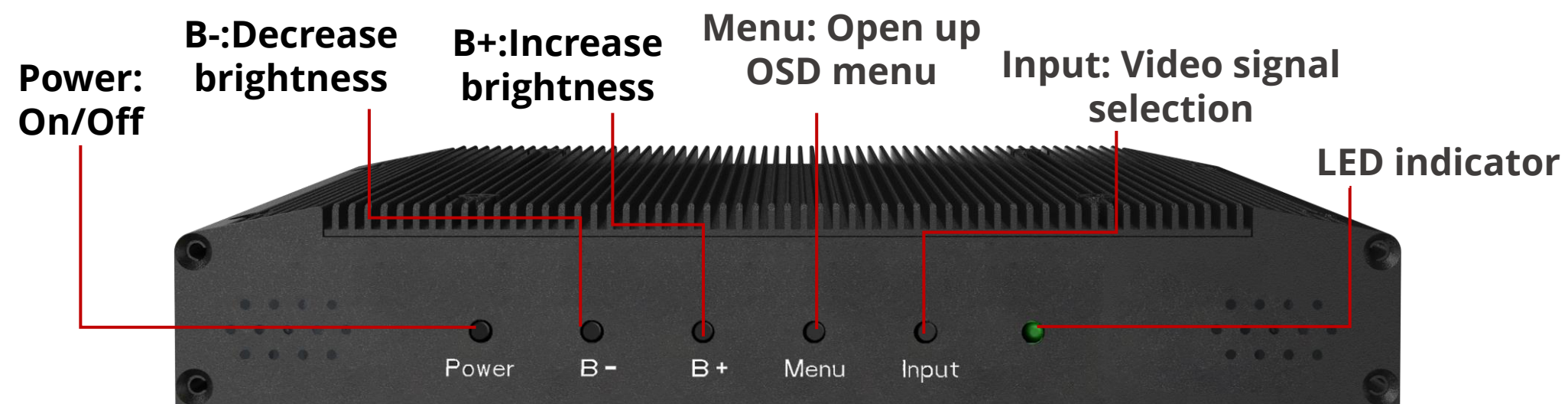
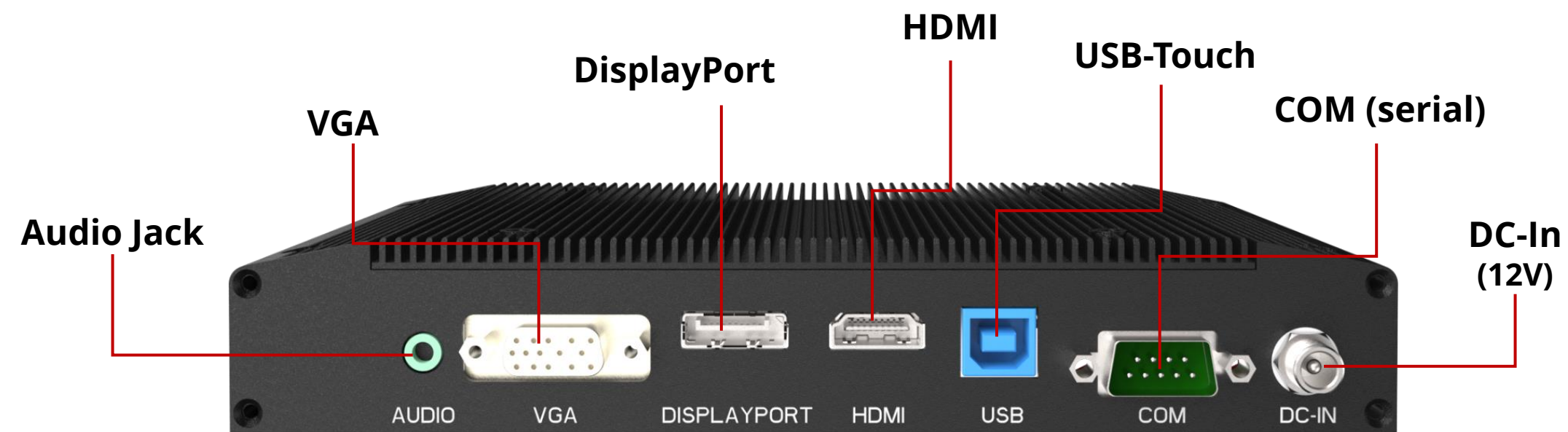
Linux +QT



	CPU	OS	SSD / RAM	Front-kit fit	Housing size	Connectors
<b>Small case version</b>	<b>S905D3</b> Quad-Core Cortex A53	Android 9	2GB RAM	7-32"	190 x 126.2 x 32mm	COM1, 2xUSB 2.0, LAN, Micro-SD card slot, W-LAN connector, <b>DC-In (12V)</b>
<b>Large case version</b>		Linux + QT	64GB eMMC	10-32"	190 x 173.2 x 32mm	COM1, 2xUSB 2.0, LAN, Micro-SD card slot, W-LAN connector, <b>DC-In (9-36V)</b> , <b>COM2</b>
		Debian 12				

\*all units have VESA100 mounting holes

# faytech's Back kits: Monitor

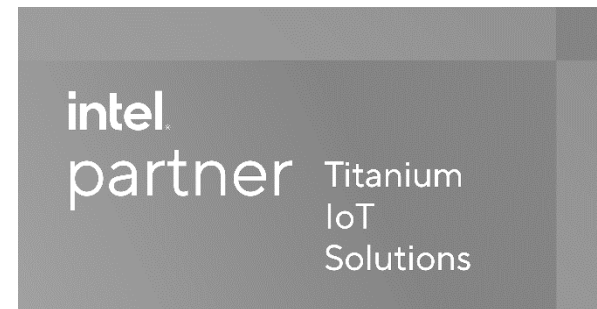


	Board	Housing Size	Buttons & Indicators	Connectors
Small case version	RTD2556T	190 x 126.2 x 32mm	Power, B-, B+, Menu, Input, LED indicator	HDMI, DisplayPort, VGA, Audio Jack, USB-Touch, COM (serial), DC-In (12V)

\*all units have VESA100 mounting holes

# Our Certifications

Besides our **ISO9001:2015** and **IATF 16949** conformity, we also have the following certifications and partnerships.



# Capacitive Touch Technology Expert



Expert in Capacitive multi-touch technology, with touch engineers solely focused on **touch sensitivity** and **firmware** fine-tuning.



## Gloves Compatibility

Adjustable touch sensitivity & firmware allows full use with industrial or medical gloves

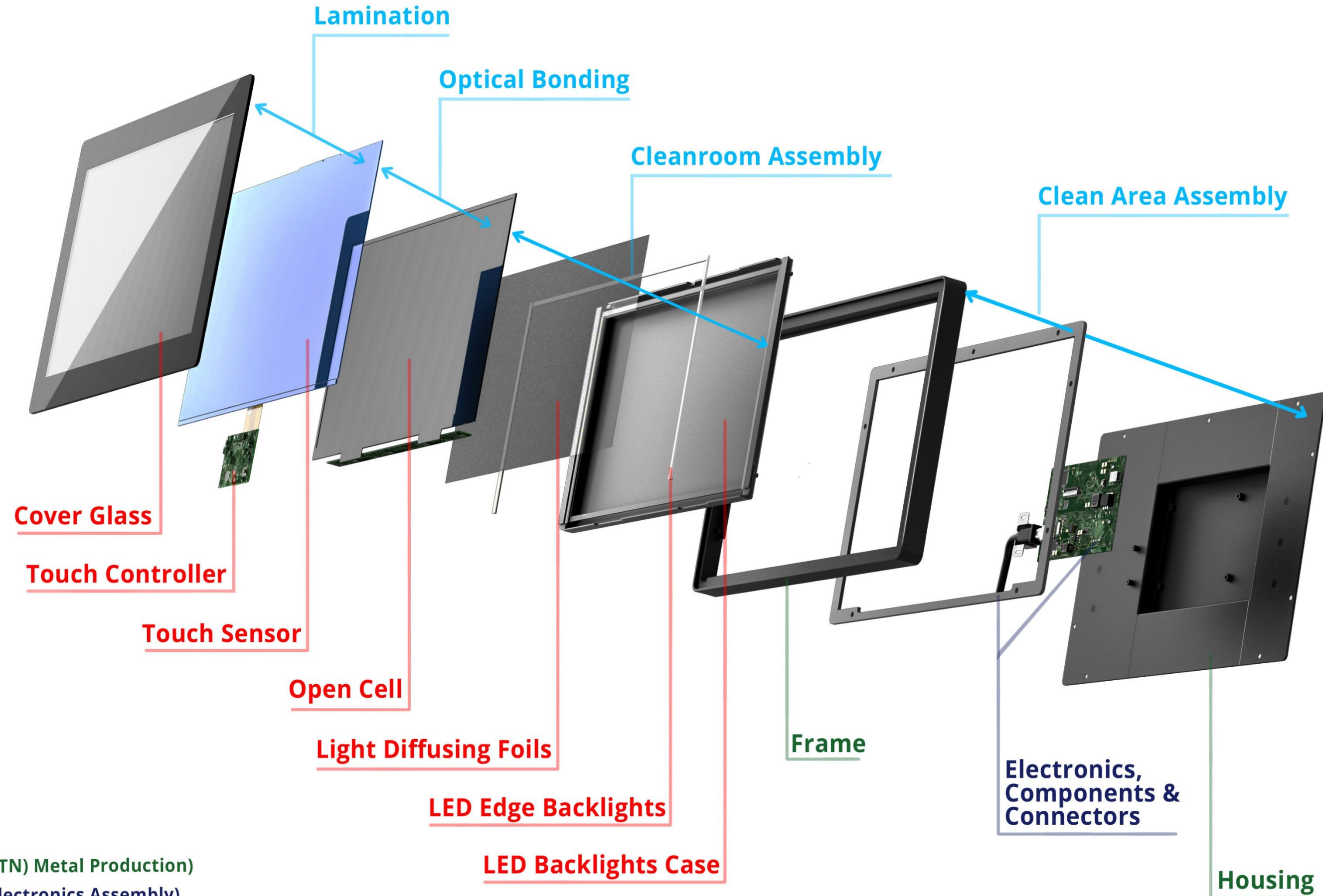


## No Droplets Interference

Due to the adjustable sensitivity, in humid or conditions with water droplets, no ghost touches will occur



# Our Advantages #1

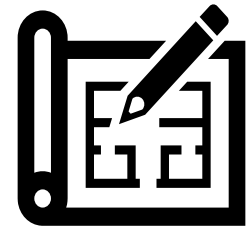


● Huizhou, China

● Suining, China (ZTN) Metal Production)

● Suining, China (Electronics Assembly)

# Our Advantages #2



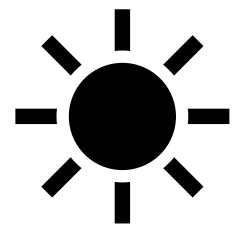
## Own Mainboard Design

With own engineers in-house & Partners in Taiwan & Germany



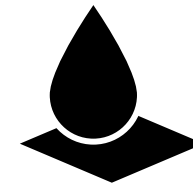
## Own Touch Controller Design

Completely done in-house (capacitive touch)



## High Brightness Modification

Up to 2,500 nits (cd/m<sup>2</sup>)



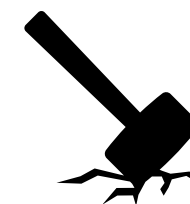
## (True) Optical Bonding

In-house service, own formula / development, fully automated with dispensing patent technology



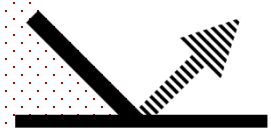
## IP65 / IP67 / IP68

Water- & dust-proof protection



## Shatter Protection

1.1-2mm cover glass, 7H, IK08 standard up to 10mm (9H/IK10 possibility)



## Coating Technologies

Anti-glare, anti-fingerprint, Anti-microbial (Kastus<sup>®</sup>), Infrared, UV



## Low Power Consumption

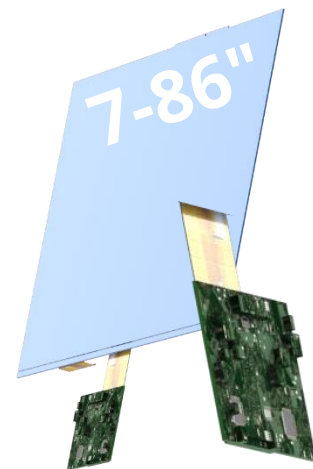
Significant cost-saving, extend product life, good for environment

# Our Advantages #3



## Cover Glass

With coating technology possibility (7-86")



## Touch Sensors & Controllers

Capacitive touch sensor & controllers designed in-house (7-86")



## Touch Panels

Cover glass + touch sensor laminated in-house (7-86")



## Housings

Aluminum / metal housing: JV with Zentner in Suining (custom sizes available)



## Completed Touch-Kits

LCD panel + Touch Panel (incl. touch controller)



Optically bonded in-house with own glue formula (7-55")

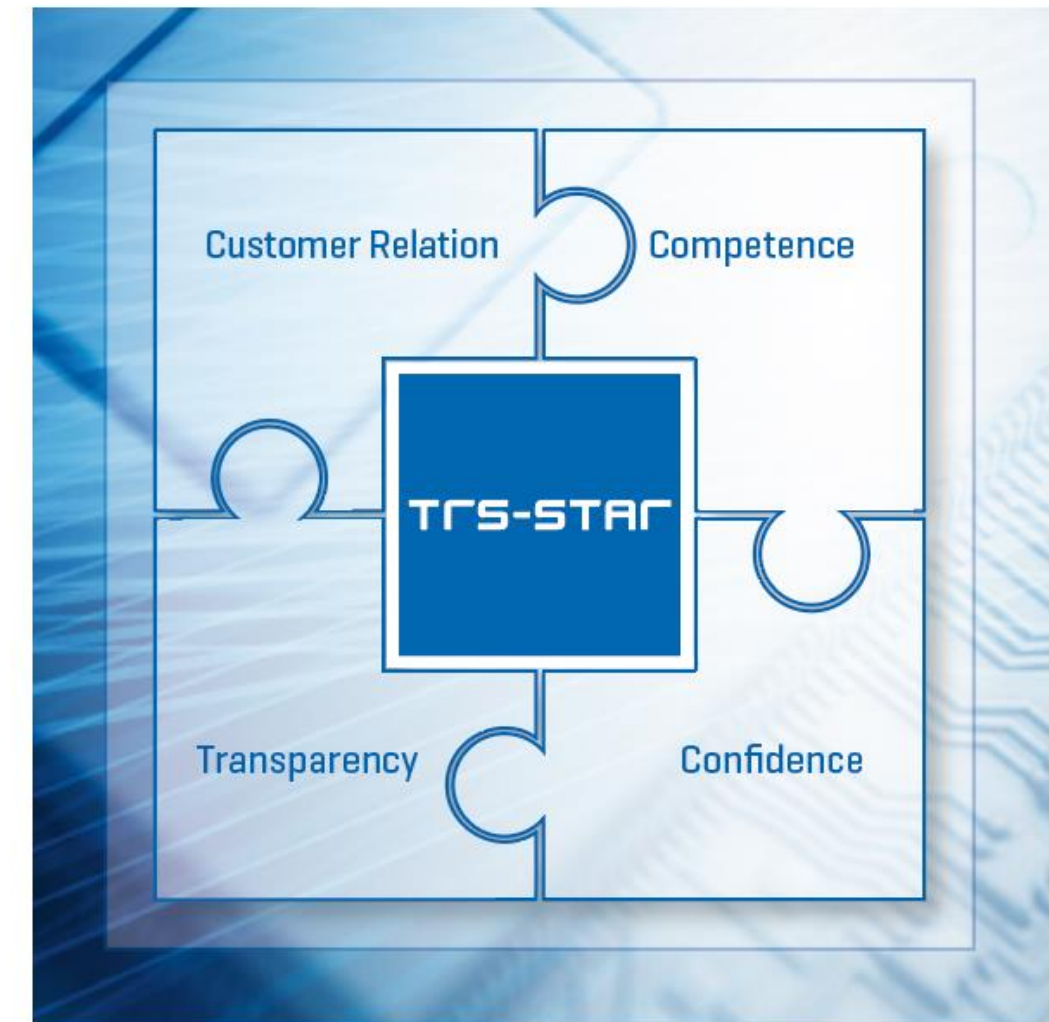


# Thank you

TRS-STAR

electronics4U

[www.trs-star.com](http://www.trs-star.com)



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