

TERRAFIX AGGREGATOR



.... T.AGG

Terrafix are pleased to announce T.AGG - The Terrafix Aggregator.

The Terrafix Aggregator (T.AGG), a new Terrafix product development, designed to drastically improve the way mobile data systems and devices operate in the field.

The T.AGG is a stand alone system which utilises secure Wi-Fi to connect user devices over a robust communication link. It can also be incorporated into an existing Terrafix TVC400 in-vehicle computer system as an integrated module within a TVC 4000.

T.AGG functions

- Includes up to 4 different mobile providers
- Built in interfaces including Ethernet, USB
- Secure Wi-Fi bubble - Utilising multi- device 802.11ac protocol
- Flexible configuration providing multiple network usage opportunities
- Aggregation of configured networks giving the optimum bandwidth available to devices connecting over the secure Wi-Fi bubble
- Fully encrypted



Specifications

CPU:	Intel ATOM™ 4x 1.91 GHz E3845
Chipset:	System on Chip
Memory:	2GB DDR3 [max 8GB]
Storage:	60GB 2.5" SSD [3Gb/s][options available] eSATAp [optional external expansion]
Operating System:	Microsoft Window-8™
Dimension:	240 x 185 x 65 mm
Weight:	2.5 Kg
Cooling:	Fanless passive cooling
Temperature:	
Operating:	0 to +60°C [extended temperature available]
Storage:	-20 to +85°C
Integrated PSU:	40W
Power Input:	+11 to +18 VDC [see note 1]
Power Consumption: [at 13.8v]	
Active [see note 2]:	8 W [non-charging], 22 W [charging]
Off:	80 mW, 14W [max charging]
Power Management:	Automotive protection Engine cranking protection Programmable ignition control
Internal Battery:	2.6 Ah [Re-chargeable 3-cell Li-ION]
Internal expansion:	1x half-mini-PCIe slot
Communications:	
Cellular:	4x modems [see Note3]
Wi-Fi:	802.11 ac, 2x2. 5 GHz 802.11 a/g/n, 2x2, 2.4/5 GHz
Bluetooth:	4.0 (Low energy)
External Interfaces:	
Ethernet:	1 x Gigabit
USB:	2x USB2.0 [max. current 500mA per port]
COM:	2x RS232 [with FULL handshaking]
Output:	1x Relay Driver
Input:	1x Ignition Sense
Antennas:	
4G/3G/2G:	2x FME per modem [Rx diversity]
3G/2G:	1x FME per modem
GPS:	SMA
Wi-Fi/ Bluetooth	2x Reverse-SMA
LED Indicators:	
Common:	1x Power, 1 x Fault, 1x HDD 1x Wi-Fi, 1x GPS, 1 x mini-PCIe
Cellular: [per modem]	1x Power, 1 x Connectivity

Notes:

- (1) Minimum operating voltage threshold of 11 VDC is designed to protect the vehicle battery from over discharge. Lower minimum operating voltages are available on request.
- (2) Typical power consumption with Win8 running, 4x cellular modems powered and network registered (idle), Wi-Fi and Bluetooth powered.
- (3) Up to 4 cellular modems may be fitted with either 4G/3G/2G or 3G/2G capability. Software options allow individual cellular modems to be configured for automatic fall-back from 4G to 3G/2G and 3G to , or locked to a given wireless technology.



TERRAFIX

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Navigation Engine:

GNSS compatibility:	GPS[L1 C/A][USA] SBAS[L1 C/A] QZSS[L1 C/A][Japan] GLONASS[L1OF][Russia] BeiDou[B1][China] Galileo[E1 B/C][Europe]
Channels:	72
SBAS:	EGNOS, WAAS, MSAS
Accuracy:	
Position	<2.5m [CEP,50%, -130dBm]
Velocity	0.05 m/s [50%@30 m/s]
Heading	0.3 degree [50%@30 m/s]
Dynamic Capability:	
Max. velocity	500 m/s
Max. acceleration	4 g
Max. altitude	50,000 m
Time To First Fix:	
Hot Start	1 s
Warm Start	26 s
Cold Start	26 s
Aided Start	2 s
Antenna Supply:	+3.3 Vdc, 50mA
Sensitivity:	-148 [cold] , -167 [tracking] dBm

4G/3G/2G cellular: [see Note 3]

Technology:	LTE/HSPA+/3G/GPRS/GSM
Frequency Band:	
LTE	800/850/900/1800/2100/2600 MHz
HSPA/3G	850/900/1900/2100 MHz
GPRS/GSM	850/900/1800/1900 MHz
Max. Transmit Power:	
LTE	Class 3 (0.2W)
HSPA/3G	Class 3 (0.25W)
GPRS/GSM	Class 4 (2W) at 850/900 MHz Class 1 (1W) at 1800/1900 MHz
Max. Data Rates:	
LTE	150 Mb/s DL, 5.6 Mb/s UL
HSPA	42 Mb/s DL 5.6 Mb/s UL
3G	384 Kb/s DL/UL
2G EDGE	236.8 Kb/s DL/UL
2G GPRS	85.6 Kb/s DL/UL
SIM Card Slot:	1x miniSIM per modem

3G/2G cellular: [see Note 3]

Technology:	HSPA+/3G/GPRS/GSM
Frequency Band:	
HSPA/3G	800/850/900/1700/1900/2100 MHz
GPRS/GSM	850/900/1800/1900 MHz
Max. Transmit Power:	
HSPA/3G	Class 3 (0.25W)
GPRS/GSM	Class 4 (2W) at 850/900 MHz Class 1 (1W) at 1800/1900 MHz
Max. Data Rates:	
HSPA/3G	7.2 Mb/s DL, 5.76 Mb/s UL
3G	384 Kb/s DL/UL
SIM Card Slot:	1x miniSIM per modem