

## AVE for your SIM

In order to get the best support for your applications AVE you can deliver your SIM cards and chipSims as subscription or even prepaid for smaller quantities..

Based on the Telit Next™ and Telit Nextplus™ we provide multi-IMSI support for true worldwide use and cost optimization.

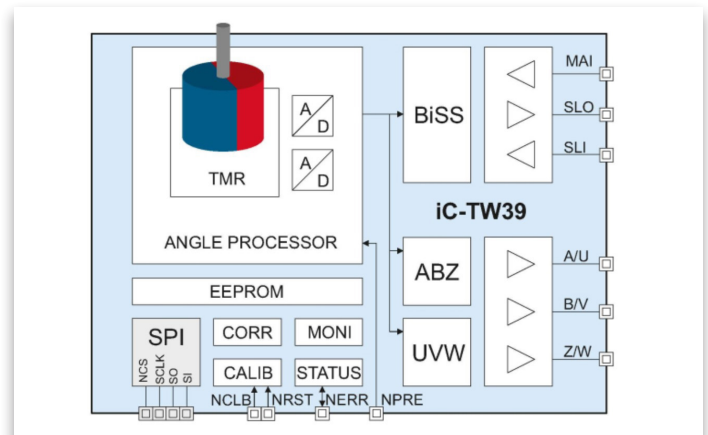
These sims can be used with all modem manufacturers and provide the following features:

- Optimize dynamic bundle adjustment
- Access to your own Telit portal
- Building triggers to automate blocking sims when data usage is too high
- Network Switch
- API access for full integration
- Remote IMSI switch and upload
- Optional OneEdge™ cloud integration

If used in combination with Telit hardware the following features are added:

- Remote AT commands and diagnostics
- FOTA (Firmware of the air update)

Please ask AVE for pricing providing your monthly data usage and (regional) coverage need and annual quantity of SIMS required by Email at [sims@ave-nl.com](mailto:sims@ave-nl.com)



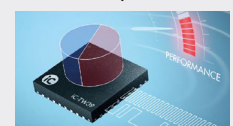
## IC-TW39 → motor control ! 24-Bit magnetic on-axis angle sensor

The iC-TW39 is a very compact TMR-based system-on-chip solution for 360-degree absolute angle sensing in the end-of-shaft position.

IC Haus presents a new TMR angle sensor with the performance level of optical encoders. Magnetic position sensors measure absolutely, contactless and wear-free. They impress with their insensitivity to dirt or moisture and allow uncomplicated encoder design. In terms of resolution and accuracy, TMR technology brings a decisive quantum leap for modern motor feedback systems with simultaneous cost advantage. IC Haus presents a new TMR angle sensor with the performance level of optical encoders.

### Features:

- Push-button calibration for ease of installation
- High operating distance and axial play tolerance
- Adjustable zero position and length
- Rotation speed up to 360,000 rpm
- ABZ output with 1 up to 65,536 pulses
- Bidirectional open-source BiSS interface
- High angle resolution of up to 24 bits
- High accuracy (INL ±0.1°) and repeatability (±0.04°)
- Ultra-low output lag of 1.5 µs
- Configurable status monitoring for alarm output
- User-programmable on-chip EEPROM
- Operation at 3.3 V from -40 °C to +125 °C





## Sealevel USB I/O

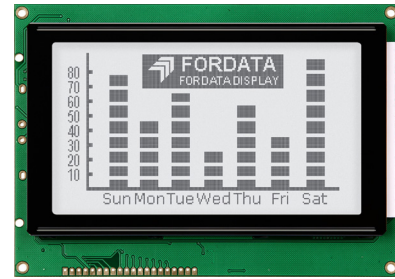
Sealevel has a broad range of USB based interface products enabling to connect laptops and small form factor embedded systems to the real world.

With USB hubs and isolators expansion and the safety can be assured.

### Products available:

- USB to serial RS232/422/485/530
- Single port to 16 ports versions
- USB Digital I/O up to 96 channels
- Relay or open collector outputs
- Opto isolated inputs
- A/D inputs upto 16 bits
- 12 bit D/A outputs
- Windows 10 and 11 drivers
- Linux support

SEALEVEL



## New LCM → Super black and Long life time LED

New in the product range of FORDATA DISPLAY is the Graphic 240 characters by 180 lines LCM with Super Black Polarizer Technology and Long Life time backlight version. Additional dust-free direct clamped edge-LED on glass technology.

### Features :

- Long Life Edge Type LED Backlight
- Positive Transflective
- LCD panel FSTN technology
- Display Area : 114.0 x 64.0 mm
- Modules Size : 144 x 104.0 x 13.0 mm
- Operating Temperature : -20 to +70°C
- Single supply voltage Input : 5Vdc/29mA
- Onboard DC-DC for driving LCD voltage

FORDATA  
FOR DATA DISPLAY



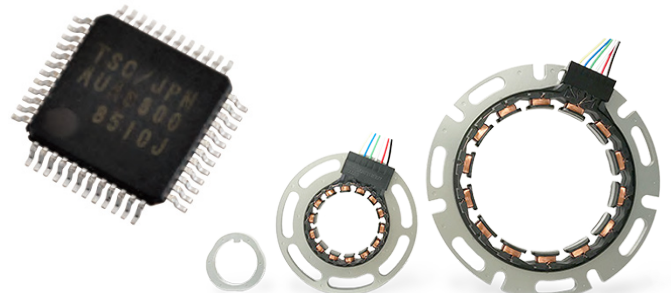
## 10.1" TFT display with driver board and control

The latest color active matrix thin film transistor (TFT) liquid crystal display (LCD) from Ampire uses amorphous silicon TFT as a switching device. It is composed of a TFT LCD panel, a backlight system, column driver + driver circuit.

### Features :

- 10.1" TFT LCD Panel
- LED Backlight System
- Resolution WXGA 1280x800 pixels
- Display Area : 216,96 x 135.6mm
- Modules Size : 229.46 x 149.1 x 4.56mm
- Operating Temperature : -20 to +70°C
- Interface : LVDS
- Brightness : 350 cd /m2
- Contrast Ratio : 800:1

AMPIRE



## TSY Singlesyn & VRDC

Tamagawa introduces the TSY series VR type resolvers with matching RD converter (RDC) for high accuracy absolute rotational position for harsh environments.

### Features TSY Series:

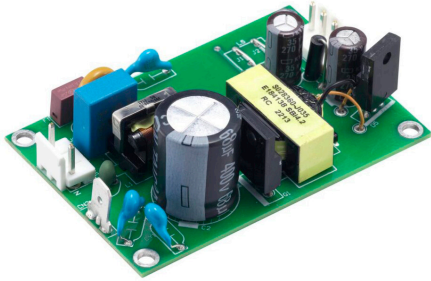
- Wide Temperature Range -40 to +150°C
- Vibration : 196 M/s<sup>2</sup> (20G)
- Shock : 980 M/s<sup>2</sup> (100G)
- Humidity : 90 % RH over

### Features (VRDC (AUA6800):

- Wide Temperature range -40 to +125°C
- High velocity revolution: 240,000 rpm
- 48 pin TQFP (7x7 mm) Pin to pin: 0.5 mm
- 16 bit resolution resolver to digital
- Serial and Parallel and ABZ output
- 3.3 V power supply

Tamagawa





## Compact 30W Connector or pin mounted power supply

Magic Power introduced a low cost design with the PE-J035 series for 30Watt and this with a very low power stand-by consumption.

### Features:

- 2x3" with only 24.2mm height
- No-Load power consumption < 0.3W
- Input Voltage 85-115/230-264 VAC
- Input Frequency 47-50/60-63 Hz
- Class II With Functional Ground Connected.
- IEC62368-1, UL62368-1 Approved
- Efficiency 85 – 86 %
- Operation Temperature -20 / 70°C

### Safety Approvals:

IEC 6 1000-4-2 UL 62368-1 2nd Edition, CSA C22.2 No. 62368-1-14, 2nd Edition



## VXR series are ideal for commercial and military aircraft, weapons systems and

VXR series are ideal for commercial and military aircraft, weapons systems and vehicles.

All VPT's product designs are of proven heritage and deliver high-reliability, also this COTS DC-DC series.

### Features:

- from 5 up to 250 watts
- Wide input voltage range
- Six-sided metal packages for EMI shielding
- -55 °C to +105 °C, no power derating necessary
- High efficiency
- Rugged environmental screening

### Standards:

MIL-STD-1275, MIL-STD-704 A-F, MIL-STD-461, DO-160, ISO-9001, DEF-STAN 59-411

Testing to JESD22, MIL-STD-810, MIL-STD-883



## New 1Watt DC-DC low cost regulated performance

The TDU 1 series consists of a set of isolated 1 Watt DC/DC converters with unregulated outputs in a compact DIP-8 package. They are designed to offer a compact low-cost alternative to regulated series with no concession on quality and lifetime

### Features:

- Input voltage range 5, 12 or 24 VDC
- Single outputs 5, 12 and 15VDC
- Continuous short circuit protection
- Voltage Accuracy output  $\pm 3\%$  max
- Efficiency up to 83%
- I/O isolation 1500VDC
- Operation temperature range -40 to 85 °C
- 3-year product warranty

TRACO POWER



## 300Watt industrial power supply → compact design

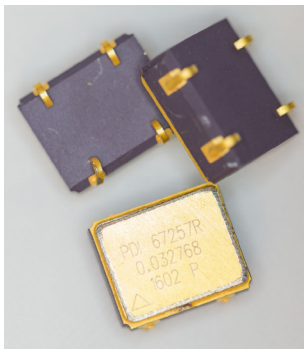
TPI & TPP series high power density AC/DC power supplies for industrial & medical applications (300 Watt)

### Features:

- 300 Watt in 4"x2" or 4.6"x2.44" package
- I/O isolation 3000 VAC rated for 250 VAC
- IEC/EN/ES 60601-1 3rd edition for 2 x MOPP
- ISO 14971 incl. risk management file
- Acceptance acc. to IPC-A-610 Level 3
- Peak power operation up to 360 Watt for 5s
- Operating temperature -40°C to 85°C
- Active power factor correction >0.9
- Operating up to 5000m altitude
- 5-year product warranty

TRACO POWER





## Temperature Compensated Crystal Oscillators

With ultra-low phase noise, low jitter, high vibration tolerances, a variety of popular packages from the PDI brand of Wi2Wi.

Voltage Controlled Temperature Compensated Crystal Oscillator (VCTCXO) TV02 serie as example.

### Features:

- Frequency Stability 1 year  $\pm 2$ ppm
- Voltage control range 10-90% of  $V_{cc}$
- Supply current only 2mA
- Output minimum peak-peak 0,8V
- Start-up time max. 2msec.

Phase Noise dBc/Hz:

@100Hz -110 @ 1kHz -132 @ 10kHz -147 @ 100kHz -151

Much more options, we'll help you with the right XO.



## LE910Cx ThreadX series

Besides the proven LE910Cx Linux series for LTE CAT 1 and 4 application Telit has introduced the footprint compatible ThreadX series

By using a different internal OS the memory demand is less and internal footprint is reduced hence the price can be reduced and WWX added.

### Features:

- LTE FDD Cat.4/1, 3GPP release 10 compliant
- Rx Diversity and MIMO DL 2x2
- Single Rx option
- VoLTE support
- SMS over IMS
- Built in UDP/TCP/FTP/SMTP stack
- WWX for worldwide non-permanent roaming available. Call us for permanent use



## Components overview for application → Drone

When designing a drone (or any other peripheral application), AVE has with Amazing interfaces incl. ESD protection for the data to the FMU Flight Management Unit of the drone. Supporting full integrated CANbus IC's, I2C and serial ESD protection and RS232/UART IC's.

### Parts that can be used:

- Barometer I2C to FMU → ESD AZ9515-02F
- Led control I2C to FMU → ESD AZ9515-02F
- CAN bus peripherals to FMU → AZKN1044T
- Radio UART to FMU → ESD AZ9565-01F
- ESD protection antenna → AZ9817-01F

With Amazing Microelectronic you protect your application and additional we have the CAN bus and serial IC's with integrated ESD !



**200 V, 10 mΩ**  
**EPC2307 GaN FET**

Joins Family of Footprint Compatible QFN Packaged Devices for High Efficiency and Design Flexibility

3 x 5 mm

Parameter (5 V <sub>GS</sub> )	EPC2302	EPC2306	EPC2305	EPC2308	EPC2304	EPC2307
$V_{DS}$	100 V	100 V	150 V	150 V	200 V	200 V
$R_{DS(on)}$ TYP	1.4 mΩ	3.2 mΩ	2.2 mΩ	4.9 mΩ	4.1 mΩ	8.2 mΩ
$I_D$ (Pulse)	408 A	197 A	329 A	157 A	260 A	130 A
$Q_g$ TYP	18 nC	11 nC	21 nC	9.8 nC	21 nC	10.6 nC
$Q_{gd}$ TYP	3 nC	1.1 nC	2.6 nC	1.2 nC	2.6 nC	1.3 nC
$Q_{oss}$ TYP	82 nC	41 nC	105 nC	49 nC	115 nC	58 nC
$Q_{rr}$ TYP	0 nC	0 nC	0 nC	0 nC	0 nC	0 nC

## QFN GaN FET Family

With the EPC2307 200V 10mΩ 130 A, EPC adds another GaN FET to their footprint compatible family of thermally enhanced easy to mount QFN GaN FETS measuring only 3 x 5 mm

The device's extremely small thermal resistance improves heat dissipation through a heatsink or heat spreader for excellent thermal behaviour, while wettable flanks simplify assembly, and footprint compatibility offers design flexibility to specs change for fast time to market

### Applications:

- Synchronous rectification
- AC/DC chargers, SMPS, adaptors
- High frequency DC-DC converters
- Class-D audio
- Wireless Power

