

mSmart-box

design your own **m**smart-box
online at www.gtteurope.co.uk
designed in minutes
delivered in days



your electronics inside
smart protection outside



taking your electronics to extremes



From paper to product

in days

eliminate mechanical design integration frustration and problems

- competitive advantage
- speed to market
- enduring support
- cost effective
- good risk management
- quality solutions



Antenna



Power



Data communications



On-site configuration



LEDs



Cable glands



Enclosures

FREE on-line design tool for your msmart-box

taking your electronics to extremes

www.gtteurope.co.uk T: 44 (0) 1572 338011

Free design tool for your msmart-box

visit www.gtteurope.co.uk



Our customers

Large companies wanting nimble prototype development, **medium sized companies** requiring a single platform to support multiple product variants and **small companies** needing low volumes. The **msmartbox** offers an easy path to rapid product development and adapts to customers needs as they evolve.

A complete mechanical integration solution

Speed to market

From a technical brief to a complete mechanical design **on-line** in minutes. A fully assembled product delivered to you in days. Accelerate your market entry, beat the competition, increase market share and improve cash flow.

Eliminate mechanical design integration frustration and problems

Physically compatible components from one supplier including power, data communications and monitoring

AVOID the STRESS and ENGINEERING TIME spent on sourcing and integration issues:

- Finding & dealing with multiple product suppliers
- Validating the specification of each component to assess whether they will integrate effectively
- Re-engineering and re-working an 'off-the-shelf' enclosure to achieve an effective configuration
- Finding that the chosen configuration doesn't work in practice

Good risk management

Problems? How do you know the cause: a faulty component, damage during assembly, a failure in effective integration? Do you get the standard response 'It's not my product that's the problem'? No such issues arise with the **msmart-box** from GTT Europe: our integrated product is simply guaranteed to work.

Cost effective

When you factor in all the costs, delays, continuity of supply and quality issues associated with multi-sourcing components, including the many hours spent on integration and the premium charged for selective genuine high specification items etc. you can soon see why the new **msmart-box** is **so** cost effective.

Competitive advantage

A solution guaranteed to work: fast! This enhances your credibility and reputation for innovation and creativity. Reliable execution promotes the excellence of your brand and products.

Enduring and resilient solutions:

1. A market ready prototype
 - no additional project steps for final production
 - can easily be further developed for market needs
 - seamless transition through each developmental phase.
2. Continuity of supply: we won't suddenly discontinue a product.
3. Your expertise is probably concentrated around the overall product and electronics. Utilise our expertise in the field of mechanical integration (making it fit in the outside world) to augment your team's skills and help you deliver the best product solution.

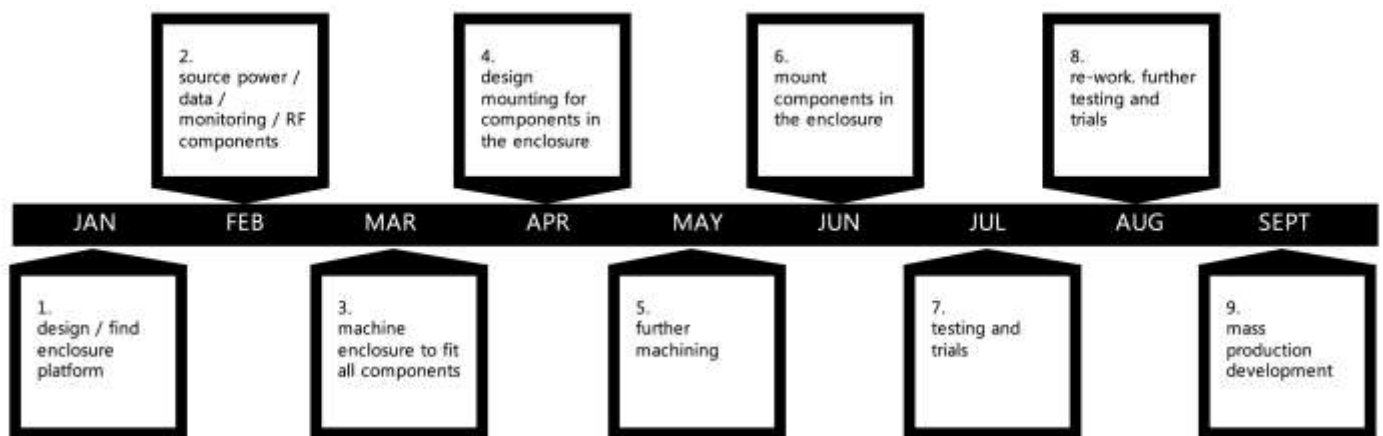


Not just enclosures—we provide complete outdoor solutions

Complete your mechanical integration design for your outdoor solutions in minutes on-line and receive your production-ready prototype in days from GTT Europe

"I started with a great idea for a new product, but then it took 12 months of frustration to realise my concept and make my electronics fit into the outside world ... costing me money, opportunities and market share"

Sound familiar? If so visit the GTT website to see how these delays and problems could have been avoided and a market-ready product can be delivered in days rather than months; and at virtually no cost compared to the tens of thousands just to get a prototype





GTT – Simply a better partner

Our Credibility:

We have delivered over 3 million Cinterion module integration solutions and over 500 thousand M2M RF solutions to a wide range of customers worldwide: from small and medium sized entities to US Fortune 100 companies

Our M2M Credibility:

Established Gemalto partner and established Cinterion innovation partner

Our Activities:

We have delivered hardware integration solutions in outdoor harsh environments for many applications including: vehicle telematics, security, remote monitoring & control and outdoor routers & gateways

Our Products:

GTT Europe is committed to providing market leading global wireless M2M embedded solutions with local touch. These include the **msmart-box**, a range of smart antenna and antenna pigtails; plus miniPCIe data modem cards and wireless module PCB integration solutions

Our Culture—the right people:

Friendly personal support



IP 67 rated



robust



wide temperature range



high wind speed resistant



msmart interfaces
integrated



antenna solutions
integrated



colour field management



mounting bracket

msmart-box overview

- One stop-shop for all your mechanical integration requirements for your outdoor product design
- Modular innovative **msmart-box** technology for all your waterproof interfaces for power and data communication and monitoring (LEDs)
- IP67+ rated integrated solution
- Production-ready sample in days
- Stable internal pressure (pressure equalisation via Gore vent)
- Prevent internal condensation (via Gore vent)
- On-site mounting options for equipment
- EN60950.22 approved
- RoHS compliant



msmart-box platform

- Anti-corrosive frame
- Robust: Drop, vibration & shock tested
- Wide operating temperature range: -40°C to +120°C
- Integrate your equipment easily with internal mounting plate options
- A wide range of application platforms
- Variety of on-site mounting options



msmart modules

- One-stop hybrid POWER/DATA/LED integration
- Interchangeable modules
- Colour field management

rf antenna pigtails

- Rear lock bulkhead antenna connector option (improved security)
- Double screened 1.32 mm microcoax cable option (improves electrical noise problems)
- Original Hirose U.FL connectors for M2M applications
- High quality soldered and crimped Hirose U.FL connectors
- Cable lengths to suit your application



antenna

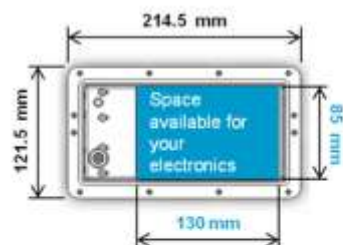
- 3G, LTE (4G) & Wi-Fi
- Robust N type industrial connector
- Wind resistant up to 216 km/h
- High efficiency antenna structure design
- Dipole structure antenna design (ground plane independent installation)

The msmart-box selection guide

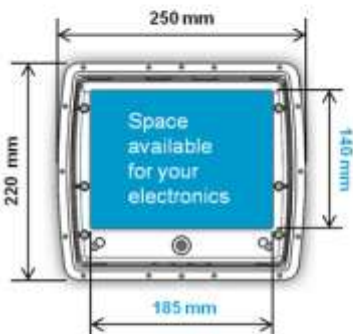
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1. Choose your platform for your electronics

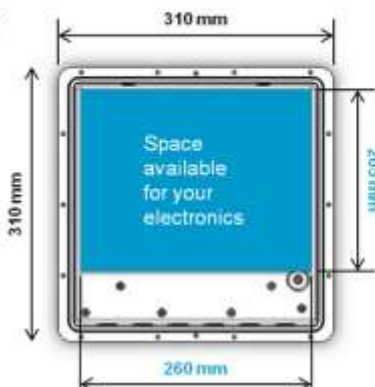
AC Enclosure



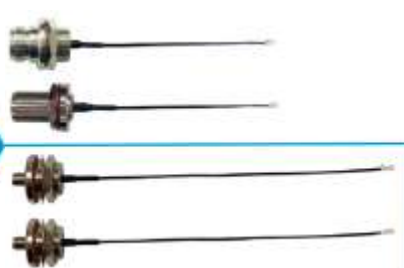
GLB Enclosure



Formosa Enclosure



2. Choose your power / data comms. / monitoring Interfaces



3. Choose your RF Interfaces

- Front lock N type assemblies
- Rear lock N types assemblies (including N type for SMA and RPSMA)
- Antenna: LTE, 3G, WiFi

4. Choose your mounting option

Wall and pole mounting brackets



Your production-ready prototype msmart-box will be with you in days

And a final word from you

Agricultural remote monitoring and control

"We design wireless grain monitoring and fan control solutions and have found that equipment from other industries do not transfer easily into this harsh environment. We selected the GTT enclosure solution for our main gateway unit for its robustness and their flexibility as a company to work with us to get a product which really fitted in this environment ... on remote sites the kit just has to work. Working with GTT really meant we were able to get to market quicker than we expected and that's made a difference for us"

Richard Johnston - Monitor & Manage

Emergency service network coverage

General Dynamics Broadband builds and integrates complex communication networks with the latest LTE wireless broadband providing high speed always on access.

"We have leveraged our experiences to deliver a robust network to emergency services in the New York City Wireless Network (NYCWiN) and the AC enclosure from GTT allowed us to short-cut our time to market (which otherwise would have taken us 18 months to 2 years to complete).

It has been an absolute pleasure for me working with GTT because they compliment our short-fall in skills and provide me with a whole RF/mechanical integration team in a short-cut route. GTT understand all our technology and our needs and provide solutions across a number of our projects to integrate our technology into the mechanical world"

Lamech Mujegu - General Dynamics Broadband

Transport infrastructure remote location monitoring

"Leveraging from our experience in the rail industry, TLC has developed a solution to help prevent disastrous and expensive train derailments in hot, harsh, remote areas. As well as the heat and dust the equipment needed to be located as high as possible to reduce the risk of vandalism, but this positioned the equipment near very high voltage lines.

It was a pleasure to understand that GTT were not just another 'me-too' enclosure supplier. GTT understood our installation problems and they were able to support the fully sealed I/O and RF interface requirements and developed a bespoke isolation solution for the RF requirements of the project"

Marcel van Zijl - TLC