

Cradlepoint

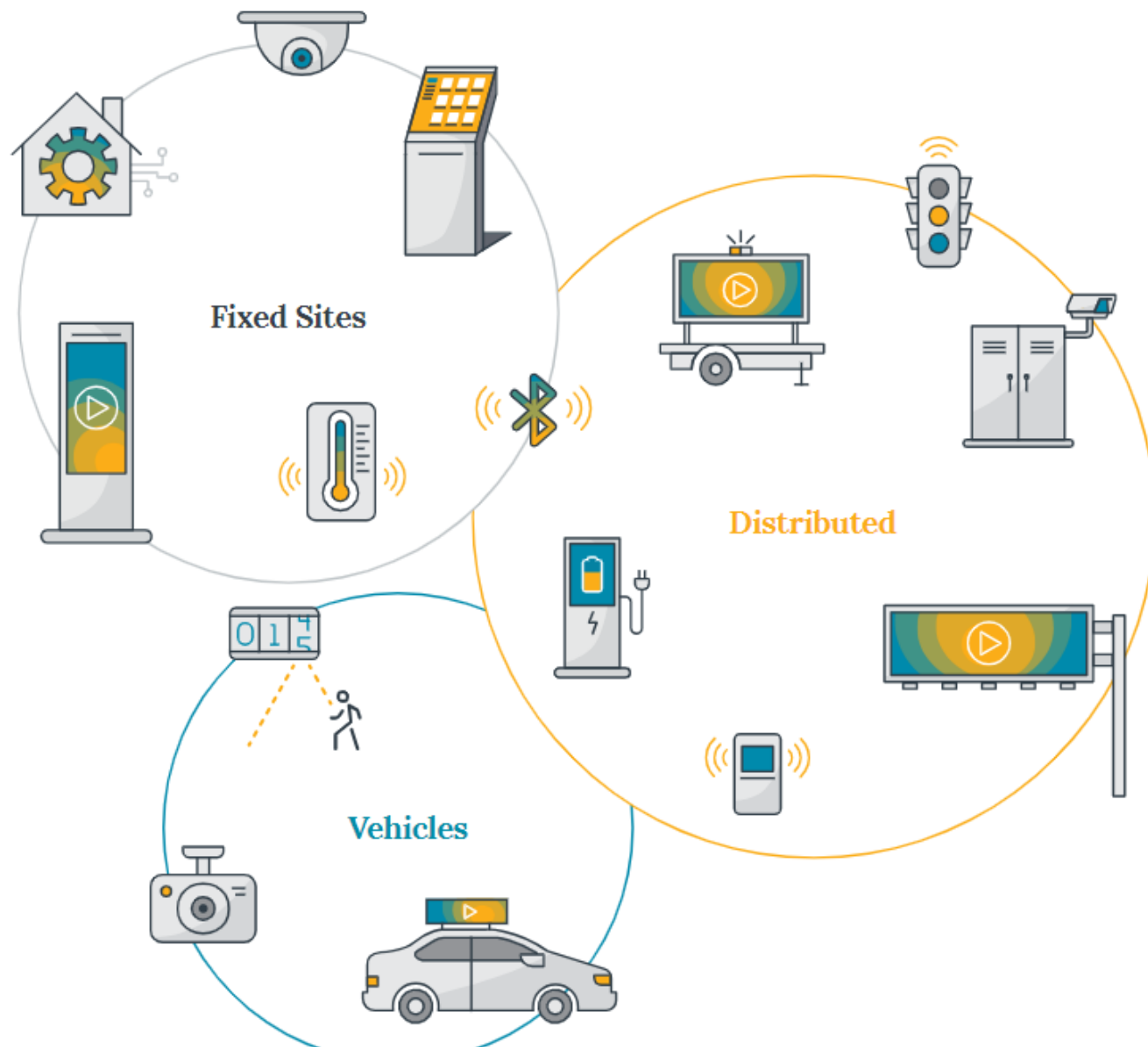
Jak wykorzystać łączność 5G w trudnych warunkach pracy?

10.04.2024

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Prezes Zarządu

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Jak działa technologia 5G

Standard mobilny 5G zapewnia łączność o jakości sieci stacjonarnej w coraz większej liczbie lokalizacji.

Cradlepoint zapewnia moc technologii LTE i 5G do bezprzewodowego łączenia stałych i tymczasowych lokalizacji, pojazdów, służb terenowych i urządzeń należących do internetu rzeczy, w dowolnym miejscu.

Firmy i inne organizacje mogą zapewnić sobie wysoką przepustowość (około 2500 Mb/s zamiast 10-50 Mb/s w ramach technologii LTE 4G) oraz minimalne opóźnienia (około 10 milisekund zamiast 40-80 milisekund w ramach technologii LTE 4G). Umożliwia to wdrażanie najnowocześniejszych rozwiązań technologicznych z różnych dziedzin, takich jak sztuczna inteligencja, robotyka, automatyzacja, rzeczywistość rozszerzona i ruchome obrazy w miejscach, w których niezbędna łączność była wcześniej niedostępna.

Do niedawna rozwiązania 5G były kierowane głównie na rynek komercyjny. Dziś są już rozwiązania przemysłowe, automotive, kolejowe czy spełniające wymagania przemysłu zbrojeniowego.

Cradlepoint posiada odpowiednie rozwiązania

Skorzystaj z naszych wydajnych i rozszerzalnych routerów LTE i 5G. Centralnie kontroluj i optymalizuj wszystkie połączenia sieciowe w różnych lokalizacjach dzięki naszym intuicyjnym narzędziom zarządzającym NetCloud. Ponad 28 000 firm na całym świecie korzysta już z rozwiązań Cradlepoint — zwłaszcza z czterech poniższych powodów:



Sieci sklepów
(przykłady: handel detaliczny, sieci restauracji i biura)



Sieci w pojazdach
(przykłady: lokalny transport publiczny, policja i straż pożarna oraz logistyka)



Internet rzeczy (IoT)
(przykłady: turbiny wiatrowe, bankomaty, stacje pakowania, kioski samoobsługowe i systemy informacyjne)



Tworzenie sieci kampusowych
(przykłady: zakłady produkcyjne, uniwersytety, stadiony, centra wystawiennicze)

Routerzy i adaptory firmy Cradlepoint są optymalnie przystosowane do pracy w sieci mobilnej 4G LTE i 5G i mają wiele zastosowań. Zapewniają dostęp do sieci WLAN i Ethernet, a przy tym często zapewniają porównywalną lub lepszą łączność niż stałe połączenia sieciowe.



Bringing Together Cellular Technology Leaders

CARRIER-FOCUSED

ENTERPRISE-FOCUSED



Leading the way in 5G infrastructure deployments



Industry's first '5G for Business' solutions

Cellular infrastructure

180 Countries around the world

70% Of the world's top carriers

2.5B Users from 2G to 5G

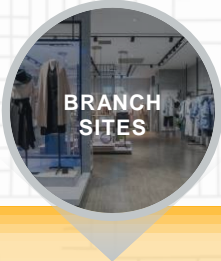
Cellular endpoints

4.5k Public safety agencies

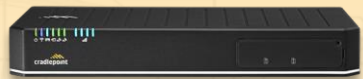
36k+ Customers

2M+ Subscriptions

Poznaj rodzinę urządzeń **Cradlepoint**



BRANCH
SITES



E3000 Series Enterprise Router (5G/4G)



E300 Series Enterprise Router (5G/4G)



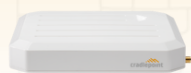
W4005 Series 5G Wideband Adapter



W2005 Series 5G Wideband Adapter



W1850 Series 5G Wideband Adapter



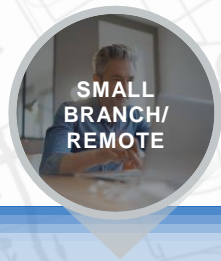
L950 Series LTE Adapter



CBA550 Series LTE Adapter



W1855



SMALL
BRANCH/
REMOTE



E100 Series Enterprise Router



E102 Series Enterprise Router



PRIVATE
CELLULAR
NETWORKING



A2400 Indoor Cellular Access Point



A2405 Outdoor Cellular Access Point



IOT



IBR200 Series Router



R500-PLTE Series Ruggedized Router



IBR600C Series Router



S700 Series Semi-Ruggedized Router



IBR900 Series Ruggedized Router



R920 Series Ruggedized Router



R2100 Series 5G Ruggedized Router



IN-VEHICLE



IBR1700 Series Ruggedized Router

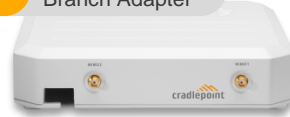


R1900 Series 5G Ruggedized Router

Cradlepoint 5G Solutions

W 1 8 5 0

Indoor Branch Adapter



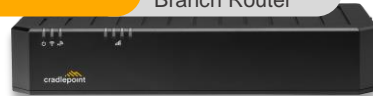
W 1 8 5 5

Outdoor Branch Adapter



E 1 0 0

Embedded 5G Branch Router



M C 4 0 0 - 5 G

Modular Modem



W 4 0 0 5

Outdoor mmWave Branch Adapter



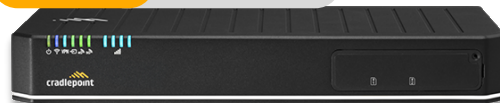
E 3 0 0

Embedded 5G Branch Router



E 3 0 0 0

Embedded 5G Branch Router



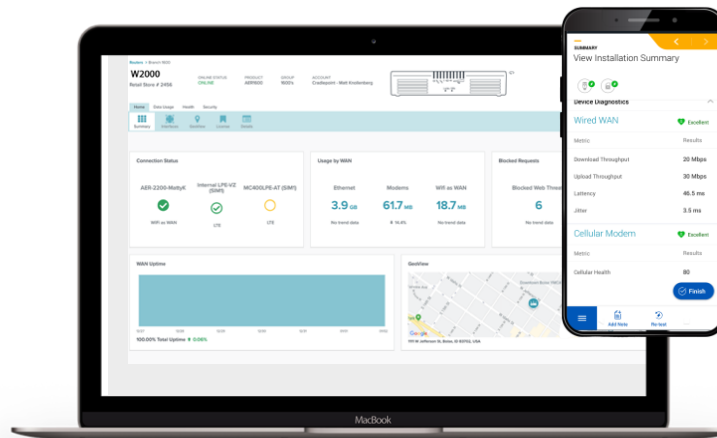
R 1 9 0 0

In-Vehicle Router



R 2 1 0 0

Vehicle Router



W1855 Series - High Level Specifications

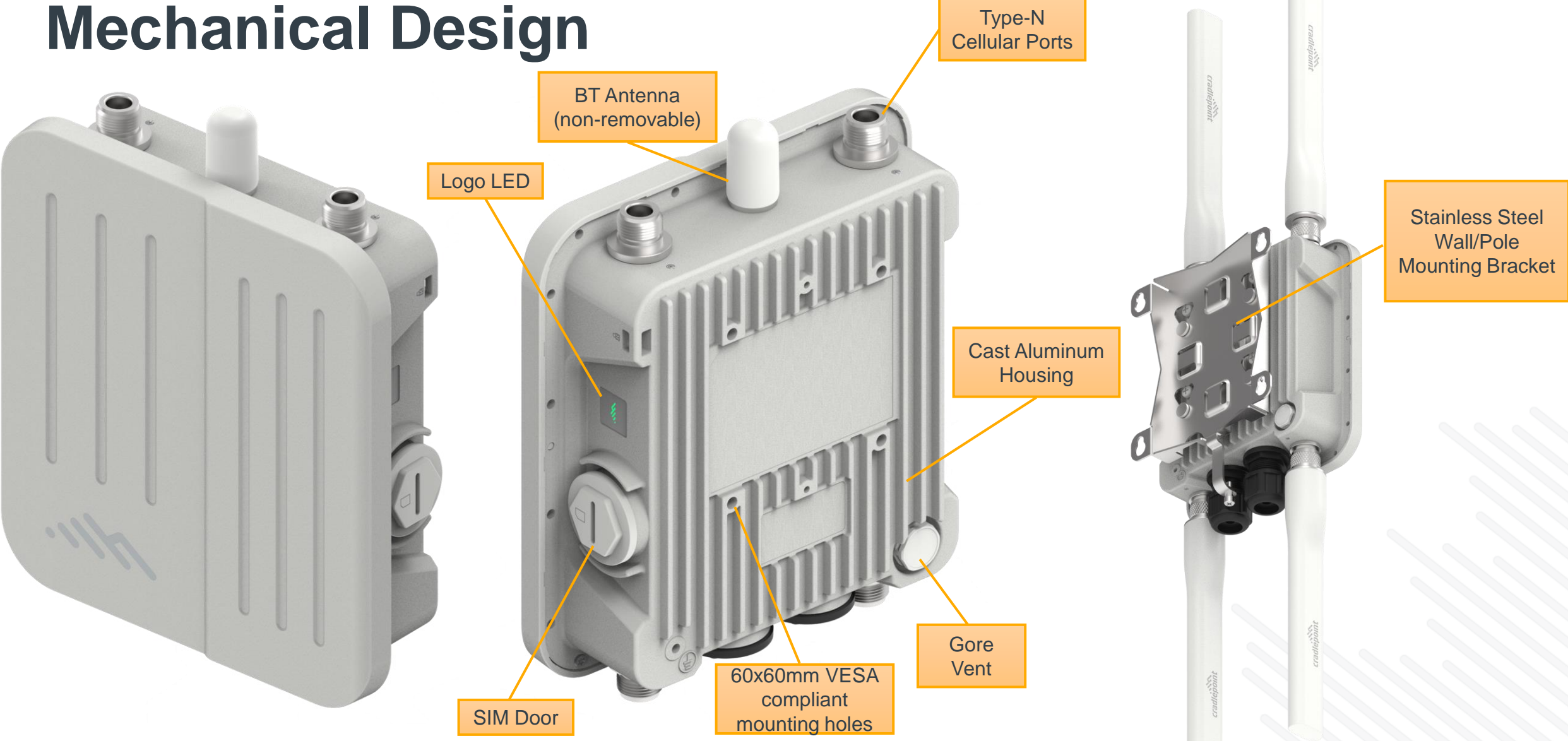
FEATURE

SPECIFICATION

Modem	3GPP Release 16 Embedded 5G NR FR1 low- and mid-band / 4G LTE category 19
Ethernet	2 x 2.5 GbE
Power	PoE 802.3at (30W)
Bluetooth	Yes, for installation only
IP Passthrough	2.0 Gbps
Peak upload/download	NSA: Up to 3.4 Gbps down SA: 2.4 Gbps down NSA: 550 Mbps up SA: 450 Mbps up
Ruggedized	IP67, K.21, 134-mph wind rating
SIM	2 Nano 4FF



Mechanical Design



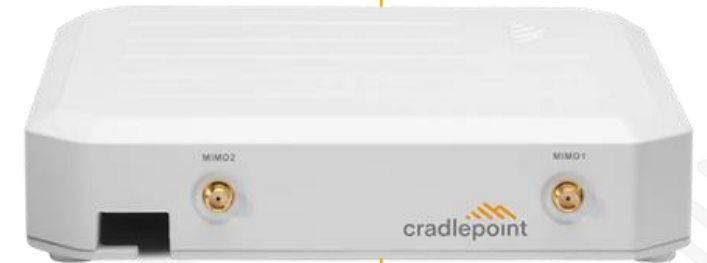
SIM Door, BT Antenna, and Cellular Antennas color matched to housing
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W1850 5GC Series High Level Specifications

FEATURE

SPECIFICATION

Modem	Embedded 5G NR FR1 low- and mid-band / 4G LTE category 19
Ethernet	2 x 2.5 GbE
USB 2.0	1
RJ-45 Console	1
Power	PoE 802.3at (30W)
IP passthrough	2.0 Gbps
Peak upload / download	NSA: Up to 3.4 Gbps down SA: 2.4 Gbps down NSA: 550 Mbps up SA: 450 Mbps up
SIM	2 Nano 4FF



Branch Continuity Adapter Portfolio



CBA550-150M



L950 - C7



W1850 - 5GC



W1855-5GC

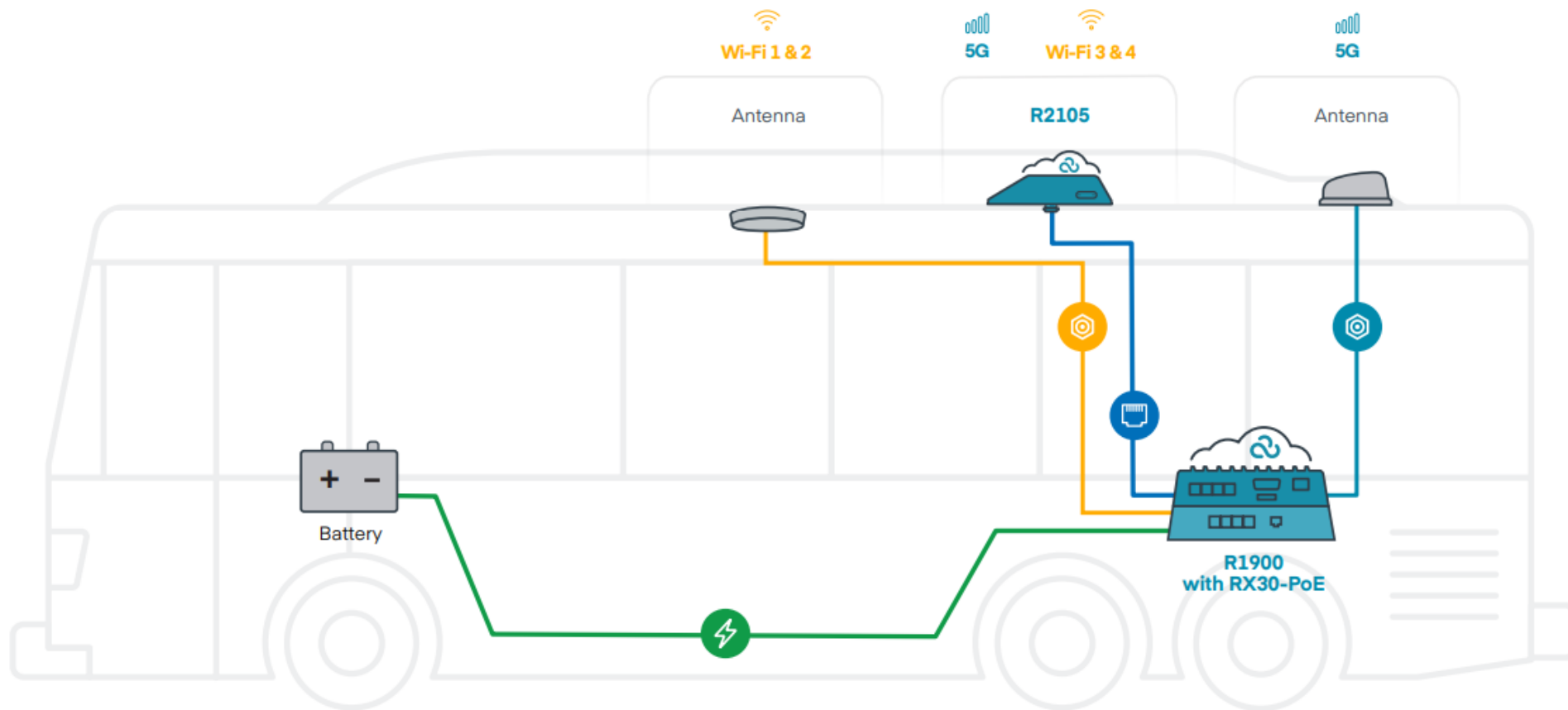


W4005-5GB

	CBA550-150M	L950 - C7	W1850 - 5GC	W1855-5GC	W4005-5GB
Modem Options	Cat 4 LTE	Cat 7 LTE	5G Sub-6Ghz & Cat 20 LTE	5G NR Sub-6Ghz & Cat 19 LTE	High-Band 5G (mmWave)
Passthrough Throughput	75 Mbps	940 Mbps	2 Gbps	2 Gbps	2 Gbps
Ethernet ports	1 x FE	2 x GbE	2 x 2.5 GbE	2 x 2.5 GbE RJ45	2 x 2.5 GbE RJ45
Region Certification	Worldwide	L950-C7A- North America L950-C7B- Worldwide	Worldwide	Worldwide	US
SIM Slots	Dual 2FF	Dual 4FF	Dual SIM slots; mini 4FF	Dual SIM slots; mini 4FF	Dual SIM slots; mini 2FF
LTE Carrier Aggregation	No	Up to 2CA Downlink Up to 2CA Uplink	Up to 7 downlink; 2 uplink	Up to 7 downlink; 2 uplink	Up to 7 downlink; 2 uplink
Ideal Environment	Indoor	Indoor	Indoor	Outdoor	Outdoor
Out-of-Band Management	No	USB Optional 3 rd party USB to Serial Console Adapter	Yes	OOBM- No In-Band-Yes	OOBM- No In-Band-Yes
Real-time device status	No	Yes	RJ-45 + USB	No	No
Power Option	No	PoE Only	PoE, AC Adapter 802.3at	PoE++, PoE Power injector 802.3at	PoE++, PoE Power injector 802.3bt

Public Transportation

Dual-modem 5G SD-WAN for high reliability and bandwidth in vehicles



- Embedded 4G LTE / 5G modem
- Built-in 802.11ax Wi-Fi 6 access point
- Gigabit Ethernet wired WAN
- DC Power
- Cellular coax
- Wi-Fi coax

Public Transportation

Dual-modem 5G SD-WAN for high reliability and bandwidth in vehicles



GNSS/GPS

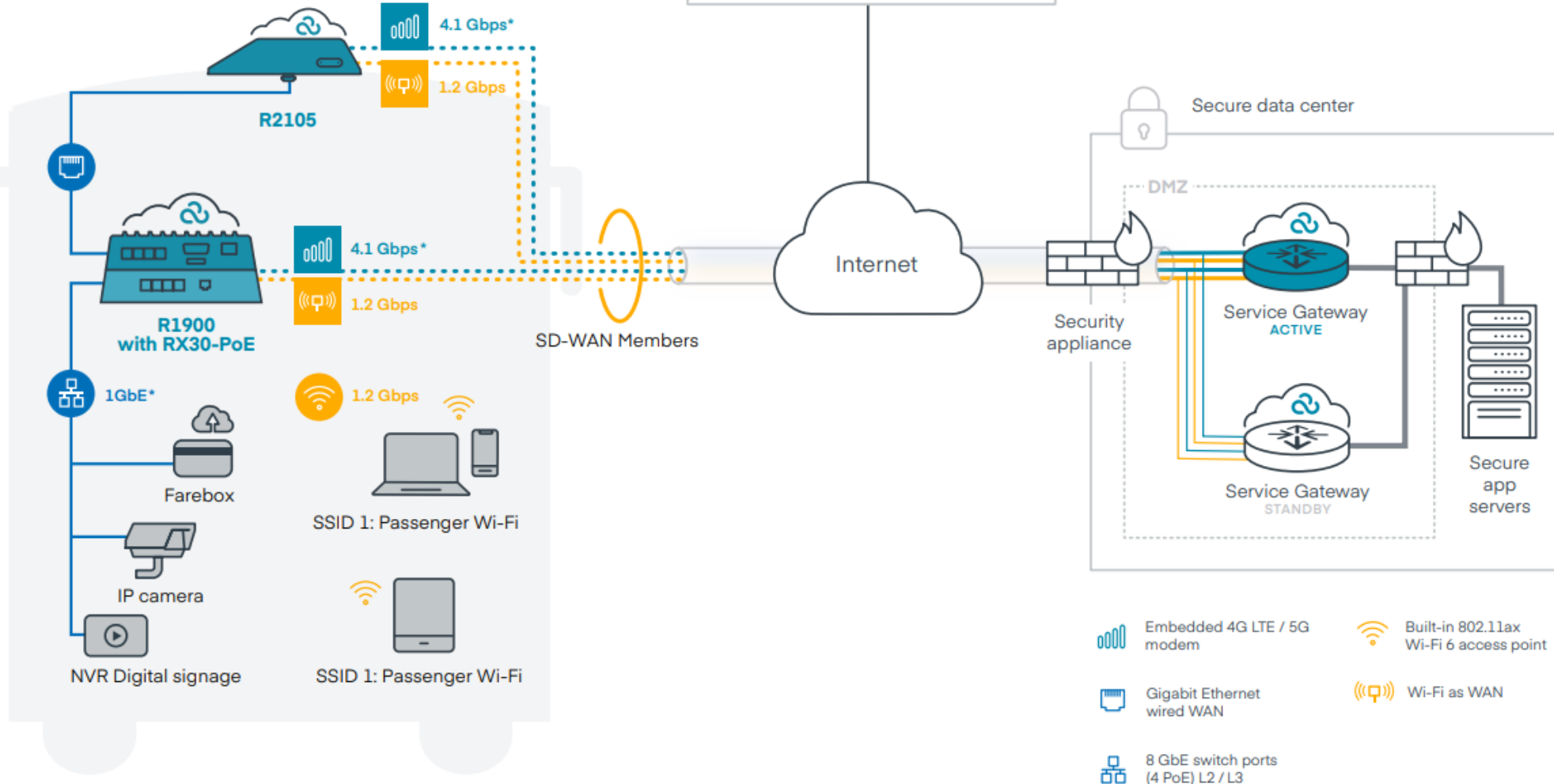


Discreet active GPS with dead reckoning via R1900



Cloud management

netcloud™
by cradlepoint



Embedded 4G LTE / 5G modem



Built-in 802.11ax Wi-Fi 6 access point



Gigabit Ethernet wired WAN



Wi-Fi as WAN



8 GbE switch ports (4 PoE) L2 / L3

Private Cellular Networking – A Growing Opportunity

Solutions tailored to use case, and technology partners to enhance value

Vertical Focus:

- Light Manufacturing
- Warehousing & Logistics
- Large Retail
- Hospitality
- Campus/Venue
- Healthcare



Cradlepoint Endpoints

Ecosystem Partners

Vertical Focus:

- Industrial Manufacturing
- Mining
- Utilities
- Ports
- Energy
- Offshore

Devices to connect to the private network, software to manage processes, and SIs to bring it all together



Enable high-speed wireless connections anywhere.



Build a reliable, secure network wherever you need it.



Connect your sites, vehicles, devices and remote workers.



Control it all via the cloud with Cradlepoint NetCloud.



Get the flexibility you need for today's distributed workflows.



Connect Your Zebra Enterprise Devices Anywhere.

Cradlepoint connects your people, places and Zebra devices with 5G and LTE through Wireless WAN public and private cellular networks.



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A Company of Kontron AG



Enabler and driver of **digitalisation**, connecting the machines to the internet worldwide.
Internationally-leading supplier of **Industry 4.0-** and **Internet of Things-**technology.
Listed on the **SDAX®** and **TecDAX®** of the German Stock Exchange.

Kontron AG generated

€1.48
billion

revenue in 2022

More than

€170
million

is invested in engineering,
research and development

Solutions portfolio covers

3,000+
customers

worldwide in various
industries

Kontron AG Divisions

Industrial

Medical

Transport

Energy

Communications

Kontron family includes

4,300+
employees

working to fulfil the group's
vision

Located in

32
countries

worldwide

Combining

9
production facilities

to support growth strategy
focused on smart IoT

Kontron 5G MPN Flavours

5G All in One Portable/Demo Box



Pre-integrated portable solution, consists of:

- 5G core on Single server
- 5G All-In-On gNB Small cell
- Switch
- Management
- Ruggedized case

5G All in One On-Premises



Ready to use solution, suitable small on-prem deployments

- 5G Core on Single server
- 5G All-In-On gNB Small cell
- Switch
- Management
- Backup on Cloud

5G Premium HA



Highly available solution for mobile private networks:

- 2 Servers HA solution
- 2 Switches
- 5G HA Core
- High throughput, high availability
- Additional applications

5G on Oracle Infrastructure



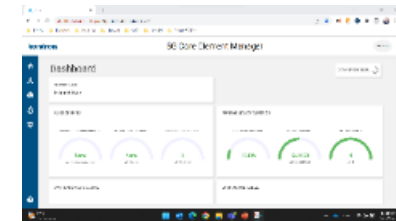
Plug-and-play solution offering from public cloud:

- Automatic provisioning
- Edge capabilities
- Oracle app integration
- Seamless OCI integration

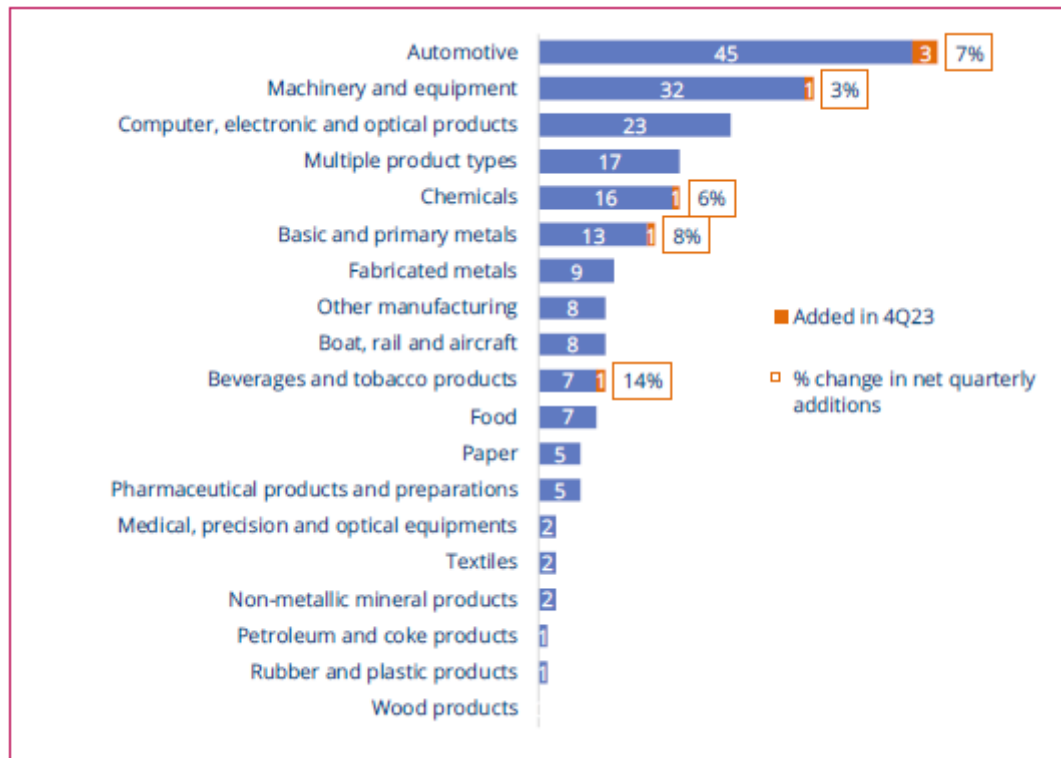
Kontron 5G MPN solution

For companies who wants reliable industrial 5G partner, the KONTRON 5G solution provides:

1. Radio network (base stations – Kontron and partners)
2. Kontron 5G Core to manage the entire 5G network, devices, users, security, and routing data traffic
3. Integration into business and industrial environment for comprehensive solution (IT/OT network, security, use cases) (TSN, Slicing, MCx, Susietec...)
4. Select, test, connect, manage 5G devices
5. E2E project managment and integration
6. Long-term support and technology roadmap (i.e. TSN)



Therefore, the manufacturing companies are among the first to introduce 5G



48

Mobile private networks
in automotive industry

Number of manufacturing customers deploying private mobile networks in trials and commercially by subcategory where identified (base: 262 organisations deploying private wireless networks with revenue greater than €100,000)

Private Mobile Networks, GSA, 02/2024

Use cases:

- › Setup of a technological network for **testing 5G devices**
- › Connecting **Flexible manufacturing booths**, e.g. working position equipped with assembly and test equipment
- › Improved **Voice communication services** for operation staff
- › **QR/BarCode scanning** for material, semi(product) scanning
- › Smart vision applications for **Automatic Optical Inspection (AOI)/Quality control**, OCR scanning, or/and video plant surveillance





Krzysztof Kora

Prezes Zarządu

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The Cradlepoint logo, consisting of a stylized orange and yellow graphic above the word "cradlepoint" in a dark blue, lowercase, sans-serif font.

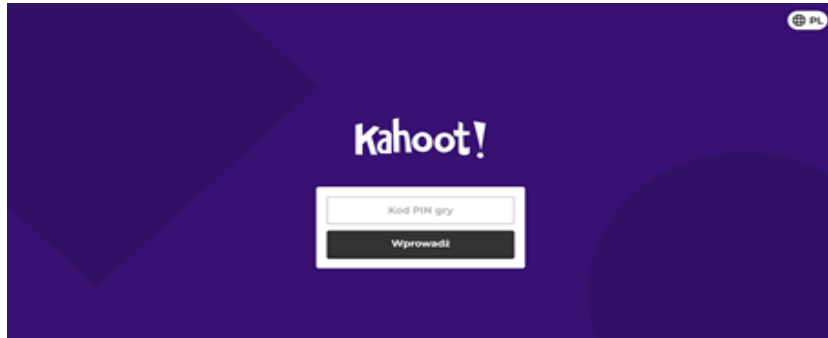
cradlepoint

PART OF **ERICSSON** 

The Kontron logo, featuring a teal vertical bar to the left of the word "kontron" in a bold, dark blue, lowercase, sans-serif font.

kontron

KONKURS



Jubileuszowy **Yanosik RS** z dożywotnim abonamentem oraz promocje urodzinowe!

Superpromocje na alkomaty i wideorejestratory

EDYCJA LIMITOWANA

-10%

15 lat yanosik.pl

YANOSIK G. 131 673 16:41
53 km/h
1400 m
Pogoda / Poznań

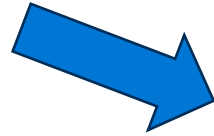
-10%



Powodzenia!

15 lat BALTICAD

Logowanie



**Podaj pierwszą literę
imienia i nazwisko
„J. Kowalski”**

By dołączyć wpisz **PIN GRY**

Po każdym panelu **zobaczysz
3 pytania
i 3 lub 4 możliwe odpowiedzi**

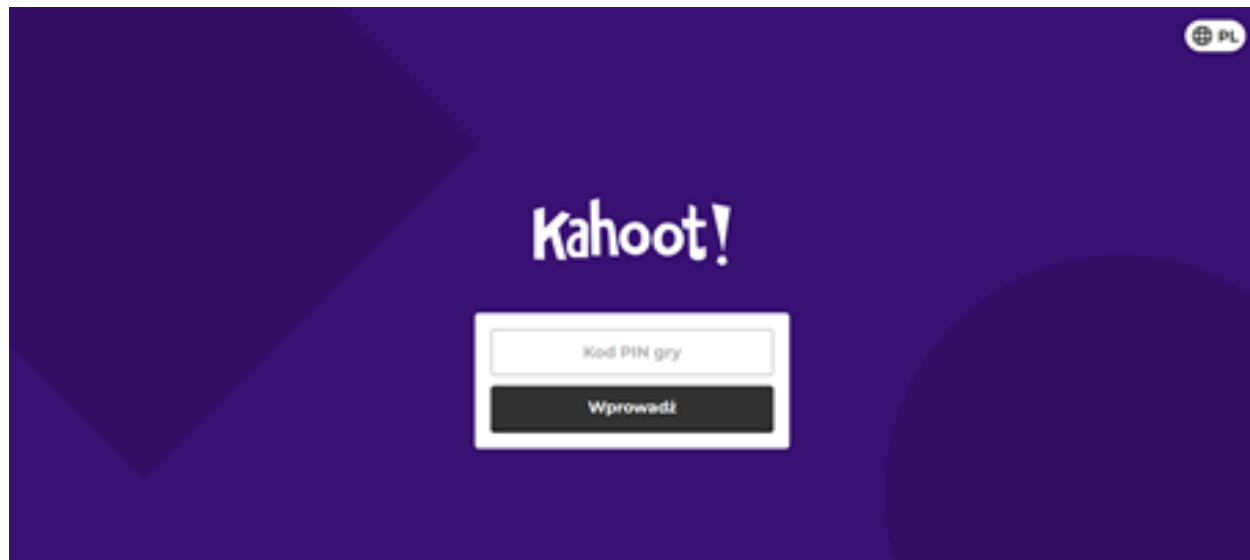
Tylko jedna jest poprawna

**W odpowiedziach liczy się:
szybkość i poprawność**

 Play Kahoot
<https://kahoot.it>

Kahoot!

Join a game of **kahoot** here. **Kahoot!** is a free game-based learning platform that makes it fun to learn – any subject, in any language, on any device, ...



Powodzenia!