

# WorldGSM™ RBTSi

Best in Class Energy efficient, 3GPP standards compliant, Dual TRX 10W BTS, with advanced coverage features - Diversity and Hopping, optimized for Rural deployments

## OVERVIEW

The WorldGSM™ RBTSi is a small capacity, compact, tower mounted, 3GPP compliant, GSM/EDGE base station available in all standard GSM frequency bands -850/900/1800/1900 MHz, that can be entirely solar powered, requiring very little power and is designed to operate outdoors in harsh environments, with no need for a shelter and air conditioning. With VNL's solar based power solution, no grid power, generator or diesel fuel is required.

VNL's WorldGSM™ RBTSi optimum specifications indirectly reduce the overall TCO incurred on setting up of multiple BTS sites. A typical RBTSi based site consists of a 24/30m light mast, entirely running on solar power solution from VNL, providing optimum RF coverage and capacity. Such sites due to less stringent passive infrastructure and power requirements can be easily replicated and operators can scale rapidly with minimum capex with good coverage.

Following market segments can be served efficiently with RBTSi based Site deployments.

- **Rural and/or Remote Communities** usually deprived of mobile services due to low ARPU and accessibility challenges.

The box is packaged with accessories necessary for required for simple Outdoor site deployment, making it a truly DIY (Do-It-Yourself) Site deployment.

## BENEFITS

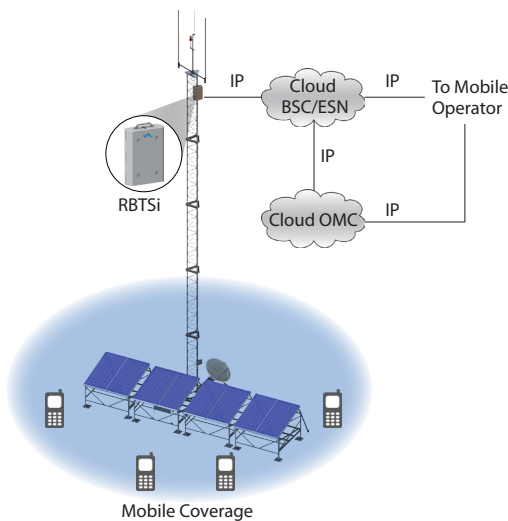
- Overcome challenges in remote deployments and help to provide mobile coverage to remote areas quickly
- Expand rapidly and scale due to simple infrastructure requirements for complete site deployment
- Near zero opex (as site can operate on 100% solar power and near zero maintenance cost), makes telecom services profitable even at low ARPU levels
- Coverage and capacity on demand, for outdoor deployments
- Optimized for satellite deployment



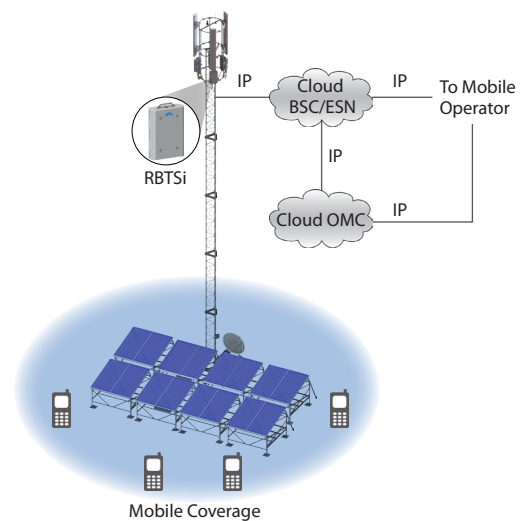
RBTSi

## HIGHLIGHTS

- Supports AMR, EGPRS, Handovers with Best in Class Power Consumption – Reduced Opex
- Compact Form Factor – Easy to Transport and Install
- 3GPP Standards Compliant – Better Performance
- Built in Optimizations for Bandwidth Savings e.g. Local Switching – Calls within Same BTS/ BTS Cluster are Switched Locally
- Support SON (Self Organizing Networks) Features, DIY (Do-It-Yourself) Installation, Operation and Maintenance



Typical RBTSi Outdoor Omni Site with IP radio or VSAT backhaul towards Mobile operator



Typical Outdoor 2+2+2 Sector Site (3 RBTSi) with IP radio or VSAT backhaul towards Mobile operator

**Related Products:** Deployed with Cloud BSC or Cloud ESN, and Cloud OMC; Other BTS variants - Micro1-BTS, Mirco2-BTS, VBTSi

# WorldGSM™ RBTSi

## SPECIFICATIONS

<b>SWaP ( Size, Weight and Power)</b>	
Dimensions (HxWxD)	583 x 393 x 145 mm
Weight / Volume	18 Kg Approx / 33 L
Power Supply	48V DC
Power Consumption	120W
<b>SYSTEM</b>	
Type	Outdoor
Mounting	Pole, Wall
Frequency Band	GSM 850 / 900 / 1800/ 1900
Functionality	BTS
RF Power Output at Antenna Port	+40dbm (10W)
Receiver Sensitivity	-111dbm
Receive Diversity	Yes
Frequency Hopping	Yes
<b>CAPACITY</b>	
Subscriber (2% GOS, 25mE Traffic per Subscriber, 28 AMR HR)	806
Concurrent Voice Calls	15 with FR, 30 with AMR-HR
EGPRS Timeslots	Configurable ( upto 15 )
<b>FEATURES</b>	
3GPP Compliance	Release 5
Clock	GPS, IEEE 1588v2
Voice Codec	AMR, EFR, FR
GPRS, EGPRS	CS1-4, MCS1-9
SON	Yes*
<b>PHYSICAL INTERFACES</b>	
Ethernet Port	1 (RJ45, Fast Ethernet)
Power Input	48V DC
Network Scan Antenna Port	SMA-Female
RF Antenna Port	2 Ports, N-Female
<b>ENVIRONMENT</b>	
Water and Dust Protection	IP65
Storage	ETS 300 019-1-1, Class 1.2
Transportation	ETS 300 019-1-2, Class 2.3
Operating Conditions	ETS 300 019-1-4, Class 4.2 ETS 300 019-1-4, Class 4.1
Operating Temperature Range	-20° C to +55 °C / -30° C to +55 °C (For Specific Requirement)

\* Roadmap

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