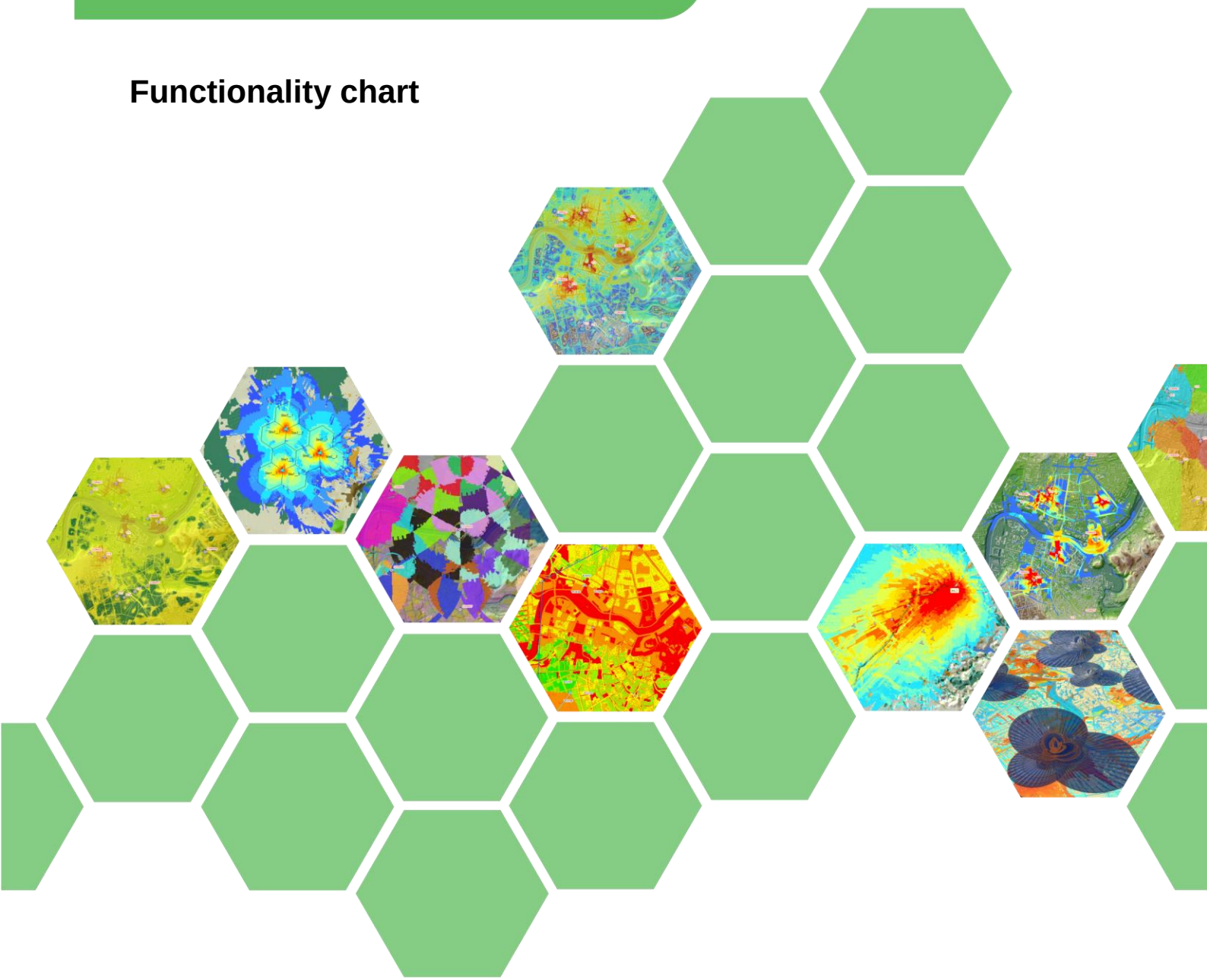
CELLULAR EXPERT

PROFILE

Functionality chart



Cellular Expert Profile module features

Tasks	Features
Point-to-point analysis	Free space path loss: ITU-R P.525-2 Fresnel zone ellipsoids: ITU-R P.526-11 Path clearance: ITU-R P.530-13 Specific attenuation: ITU-R P.676-8 using input from ITU-R P.837-5, ITU-R P.838-3 and ITU-R P.839-3 Rain attenuation: ITU-R P.530-13 Diffraction algorithms: Single knife-edge (ITU-R P.526-11) Deygout (ITU-R P.526-11) Average (ITU-R P.530-13) Path loss models: ✓ Line-of-sight ✓ Hata ✓ Diffraction ✓ Macro Adaptive ✓ SUI ✓ Reflection analysis ✓ Multipath analysis ✓ Anti-correlation analysis ✓ Antenna height optimization ✓ Reporting
Propagation Models: HATA	Basic algorithm: Okumura-Hata equitation Type: Point-to-multipoint Frequency: ~ 150 MHz - 2 GHz Distance: up to 100 km Hata Model Parameters: ✓ Standard (ETR 364, COST 231 and ITU-R P.529-3) ✓ Macro Model ✓ 9999 Model (Ericsson) Effective Antenna Height methods: ✓ Absolute ✓ Profile ✓ Average ✓ Relative ✓ Slope Diffraction ✓ Single knife-edge (ITU-R P.526-11) ✓ Deygout (ITU-R P.526-11) ✓ Spherical Earth (ITU-R P.526-11) ✓ Average (ITU-R P.530-13)

Tasks	Features
Line of Sight	Basic algorithm: ITU-R P.452-14 Type: Point-to-point and Point-to-multipoint Frequency: about 700 MHz - 40 GHz Distance: up to 100 - 150 km Percentage of Time: 0.001 to 50. Specific attenuation: ITU-R P.676-8 using input from ITU-R P.837-5, ITU-R P.838-3 and ITU-R P.839-3. Diffraction: Deygout method of ITU-R P.526-11 Rain attenuation: ITU-R P.530-13
Walfish-Ikegami	Basic algorithm: COST 231 Model (ETR 364, COST 231 Final Report) Type: Point-to-area (multipoint) Frequency: about 800 MHz - 2 GHz Distance: up to 5 km
SUI	Basic algorithm: IEEE 802.16 Type: Point-to-area (multipoint) Frequency: about 2 GHz - 5 GHz Distance: up to 70 km
Best Server calculation	N^{th} best servers coverage, number of servers coverage N^{th} best servers field strength coverage
Prediction Model tuning	Evaluation of prediction accuracy Hata model: ✓ 9999 model parameters adjustment ✓ Macro model parameters adjustment ✓ Clutter loss offset determination for each type of clutter Walfish – Ikegami model tuning SUI model tuning Line of sight model: ✓ One slope model tuning ✓ Dual slope model tuning

For more information contact Cellular Expert team today:

e-mail info@cellular-expert.com

REQUEST WEBCAST DEMONSTRATION