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Nota di contenuto	Intro -- ADVANCED GALILEO AND GPS RECEIVERTECHNIQUES: ENHANCED SENSITIVITYAND IMPROVED ACCURACY -- ADVANCEDGALILEOANDGPSRECEIVERTECHNIQUES: ENHANCEDSENSITIVITYANDIMPROVEDACCURACY -- Contents -- Acknowledgments -- Abstract -- Introduction -- Known Methods to EnhanceSensitivity -- 2.1. Assisted Satellite Navigation -- 2.2. Single Shot Positioning -- 2.3. Highly Parallel Correlation -- 2.4. Noncoherent Integration -- 2.5. Combined Galileo and GPS Reception -- 2.6. Conclusion -- Differential Correlation -- 3.1. Galileo/GPS Signal Specification -- 3.2. Down-Conversion and Doppler Compensation -- 3.3. Despreading and Coherent Integration -- 3.4. Differential Correlation Mean -- 3.5. Differential Correlation Variance -- 3.6. Synchronization Detection -- 3.7. Detection Threshold -- 3.8. Differential Correlation Sensitivity -- 3.9. Coherent Integration Sensitivity -- 3.10. Noncoherent Integration Sensitivity -- 3.11. Sensitivity Gain -- 3.12. Code Phase Estimation -- 3.13. Early-Late Discrimination Function -- 3.14. Differential Correlation Accuracy -- 3.15. Noncoherent Integration Accuracy -- 3.16. Accuracy Improvement -- 3.17. Conclusion -- Adaptive Detection Threshold -- 4.1. Attenuation Mitigation -- 4.2. Detection Threshold Adjustment -- 4.3. Cross-Correlation Mitigation -- 4.4. Attenuation Estimation -- 4.5. Differential Correlation Sensitivity -- 4.6. Noncoherent Integration

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Sommario/riassunto

This book introduces new ranging techniques which have been shown to improve the reception sensitivity and positioning accuracy of GPS and Galileo receivers. These can be implemented with low complexity and in addition to existing methods.