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## KM3NeT Acquisition Electronics: Status, Upgrades and current developments

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The KM3NeT Collaboration is currently building a neutrino observatory in the Mediterranean Sea, deploying thousands of Digital Optical Modules in glass spheres over several cubic kilometers. These modules host acquisition electronics responsible for reading out 31 Photomultiplier Tubes. This contribution offers an overview of KM3NeT's acquisition electronics, emphasizing recent upgrades, ongoing developments, and reliability enhancements. The presentation addresses reliability improvements through theoretical analyses (FIDES method) and practical evaluations (HALT method). Synchronization efforts are also detailed, including current implementation at the Digital Optical Modules and the Detection-Unit Bases to achieve 1 nanosecond precision between nodes.

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