Data Management Plan
D1.2

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PU=Public; SEN=Sensitive, limited under the conditions of the Grant Agreement

Modification Control

VERSION	DATE	DESCRIPTION AND COMMENTS	AUTHOR
0.1	19.01.2024	First Draft	Giulia Aprile INRiM
0.2	07.02.2024	Second Draft	Giulia Aprile INRiM
0.3	02.05.2024	Third Draft, following the integration of Annex 1 by the WP Leader	Giulia Aprile INRiM
0.4	28.05.2024	Fourth Draft, following the revisions by the internal expert	Giulia Aprile INRiM

List of contributors

- Giulia Aprile
- Antonietta Parracino (*internal expert for reviewing*)

List of Acronyms

Acronym	Full name
DMP	Data Management Plan
EC	European Commission
EOSC	European Open Science Cloud
FAIR	Findable, Accessible, Interoperable, and Re-usable
GaP	Gallium Phosphide
LNOI	Lithium Niobate On Insulator
MTP	Micro Transfer Printing
OMO	Optomechanical Oscillator
OMT	Opto-Mechanical Thermometer
OPM	Optically Pumped Magnetometer
PhC	Photonic Crystal
PICSq	Photonic Integrated Circuit Squeezer
SiN	Silicon Nitride
TPOC	Two-Photon Optical Clock
WP	Work Package

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1. Introduction

1.1   Purpose of this document

The Data Management Plan is the Deliverable 1.2 (D1.2) within the WP1 – Coordination and project management work package of the QUANTIFY project. This deliverable introduces the first version of the DMP.

The DMP describes the way in which data will be handled, its purpose is to ensure the availability and utility of the project's research data. In addition, the plan will outline the measures that will be taken in order to maximize access and re-use of the data for further purposes and applications. The QUANTIFY consortium will:

- manage the datasets that will emerge from the project, and how best practices in terms of metadata and archiving will be used to ensure that the data will be findable, accessible, interoperable, and reusable for other potential users;
- enhance the national and international dissemination of scientific research results;
- reduce the duplication rate of scientific studies;
- strengthen interdisciplinary research and mutual knowledge within the Partners;
- increase the transfer of knowledge to businesses and transparency towards citizens;
- make the use of scientific contributions for educational and dissemination purposes more efficient;
- favour the long-term conservation of scientific production.

In this way, all the interested parties will easily search, find and access projects results and outputs, which can be reused to foster the dissemination and their validation by interested communities.

QUANTIFY will make its research data in line with the FAIR principles, in compliance with guidelines and policies of the European Commission, to ensure that they are soundly managed and can therefore enter in the wider European Open Science Cloud circuit (https://eosc-portal.eu/), which capabilities will be exploited and adopted to support open access research policy.

The objectives of the DMP are:

- To **identify** the **datasets** that QUANTIFY will produce;
- To **define** how these datasets will be made **FAIR**;
- To **define** the allocation of **resources** (costs and responsibility) for data management during and after the project;
- To **define** procedures for data security (including data recovery as well as safe storage) during the project and for long term preservation.

The DMP will be continuously updated and revised as the implementation progresses, in particular two moments were set: D1.4 – Project activity and management report (**M24**) and D1.6 – Project final report and DMP update, QUANTIFY achievements, follow-up activities and goals (**M42**).

The main stakeholders for this document are primarily constituted by the Consortium partners.

2. Project Data

This section reports a preliminary list of the project datasets. Within the *Annex 1 - Datasets* more information related to the datasets are reported (goal, data origin, data type, estimated size, file formats, expected volume). However, it seems important to highlight that this represents the first version of the QUANTIFY Data Management Plan, therefore more detailed, precise, and structured information on the produced datasets will be included by the partners in the subsequent review of the document (D1.4 – Project activity and management report - **M24**).

2.1 Project datasets

Dataset name	Partner in charge	WP
DS1_QUANTIFY_ProjectConsortium Consortium members	INRiM	1
DS2_QUANTIFY_GeneralAssembly General Assembly members	INRiM	1
DS3_QUANTIFY_ExecutiveBoard Executive Board members	INRiM	1
DS4_QUANTIFY_MTP Realization of uTP of LNOI and GaP structures on SiN to deliver the PICSq and nano-OMO	UGent	2
DS5_QUANTIFY_OPM Develop a miniaturized quantum enhanced OPM with PIC and MEMS components	ICFO	3
DS6_QUANTIFY_TPOC Develop a miniaturized quantum enhanced TPOC with PIC and MEMS components	CSEM	4
DS7_QUANTIFY_OMT Develop an OMT based on a photonics and phononics crystal	SU	5
DS8_QUANTIFY_MetrologicalAssessment_OMT Metrological Assessment of the OMT	INRiM	6
DS9_QUANTIFY_MetrologicalAssessment_OPM Metrological Assessment of the OPM	INRiM	6
DS10_QUANTIFY_MetrologicalAssessment_TPOC Metrological Assessment of the TPOC	INRiM	6
DS11_QUANTIFY_Squeezed_Light_Evaluation Characterization of the squeezed light source in terms of Spectra, Zero-Span measurement and loss analysis	UHAM	6
DS12_QUANTIFY_Homodyne_Detector_Evaluation Characterization of the newly developed balanced detector in terms of Dark Noise Spectra and linearity measurements.	UHAM	6
DS13_QUANTIFY_CommunicationDisseminationExploitationActivities List of the Communication, Dissemination, and Exploitation activities during the project lifetime	INRiM	7

2.2   Data summary in QUANTIFY

Questions	QUANTIFY data
What is the purpose of the data generation, collection, or re-use, and its relation to the objectives of the project?	QUANTIFY project generates data with the purpose of develop the essential building blocks and novel quantum enhanced techniques for future chip scale optical clocks, optically pumped magnetometers and optomechanical temperature sensors.
Why data generation/collection is necessary?	Data generation/collection is necessary to optimize device fabrication processes and to characterize the performance of these devices.
What is the origin of the data, either generated or re-used?	The data generated in this project will be combined with participants' pre-existing data, data from the scientific literature, real world measurement data and simulation data.
Will the project re-use any existing data and what will the project re-use it for? What is the origin of the re-used data?	The project will re-use existing data for set up and define the new fabrication procedure and processes, and for comparing device performances with the primary standards.
Which types and formats of data will the project generate or re-use?	The project will generate computational and experimental data (SOPs/protocols, imaging, measurements, calibrations methods, comparison reports, models/algorithms, fabrication process flow). They will collect through word templates for SOPs/protocols, images in JPEG format, numerical data in xlsx, CSV, and txt format, models/algorithms in .py and .mat format, text description data in Markdown format. Data and metadata will be requested, stored and transferred in comma-separated values CSV format. To facilitate the data exchange, MS Excel compatible files including comma separated and .xls(x) format will be also accepted. For statistical purposes, other formats include .sas7bdat (SAS), .RData (R), .SAV (SPSS), .mat (matlab). Where applicable data formats may be migrated when new technologies become available and are proved robust enough to ensure digital continuity and continued availability of data. Within the *Annex 1* more information regarding the form and format of the data are available.
What is the expected size of the data that the project intends to generate or re-use?	The estimated overall size of the data/research outputs is expected to be in the range: 10 GB - 1 TB. Within the *Annex 1* more information regarding the estimated size of the data are available.
To whom might the project data be useful outside the project?	The project data could be helpful other research institute to compare data on the performance of on-chip devices.

3. FAIR Data

In this section the compliance with the FAIR data principles is reported.

3.1   Findable

Making data findable including provision for metadata: Questions	QUANTIFY data
Will data be identified by a persistent identifier?	All non-confidential datasets will be assigned a unique persistent identifier (e.g. DOI). The DOIs will be referenced in related publications on journals and within presentations at Conferences. Furthermore, project deliverables are assigned a unique identifier QUANTIFY_[number of Deliverable]_[Title]_[version]_[*date of submission, when submitted*], e.g. QUANTIFY_D1.1_ProjectManagementHandbook_v0.1_20240228 (already submitted). All files made publicly available reference QUANTIFY in their name. In particular: meeting documents (agenda, minutes, presentation), conference presentations, and deliverables, with the recommendation to follow the instructions reported within the Project management handbook (https://doi.org/10.5281/zenodo.10849415)
Will rich metadata be provided to allow discovery? What metadata will be created? What disciplinary or general standards will be followed? In case metadata standards do not exist in your discipline, please outline what type of metadata will be created and how.	All data will have an associated metadata document (stored as a .txt file) which describes key aspects of the data. In details, *Annex* 1 gives more information about created metadata.
Will search keywords be provided in the metadata to optimize the possibility for discovery and then potential re-use?	Search keywords will be implemented for optimizing possibilities for re-use.
Will metadata be offered in such a way that it can be harvested and indexed?	Yes, they will.

3.2   Accessible

Making data accessible: Questions	QUANTIFY data
Repository	
Will the data be deposited in a trusted repository?	Data will be available to all the consortium through the SharePoint. In addition, accessibility of data/research outputs will be guaranteed, within the scope of IPR protection, by using ZENODO, as trusted platform, which assign a Digital Object Identifier (DOI) to each dataset. All will be published without restrictions, for all the data and deliverable labeled as Public. Public deliverable will be also uploaded within the Dissemination area of the QUANTIFY website (quantify-project.eu). The only data which will not made openly accessible will be data which contain personally identifiable information and data underlying deliverables that are identified as "Sensitive" – SEN. Each publication will cite the DOI of related datasets, thus connecting them directly to the research outputs. The IPR will be managed using the DMP and the project's exploitation plan, in full compliance with the CA, or a document of equal value, and the GA. The data/research outputs will remain accessible for the lifetime of the repository. All the data which are necessary to validate the results presented in scientific publications/research

	outputs will be made openly available as default unless there is a specific reason not to publish them. If necessary, open access will not be provided to some of the data/research output due to IPR consideration (e.g. whilst a patent application is pending, data arising from stakeholder engagement activities containing commercially sensitive content). Pre-processed data will not be provided unless there is a clear reason for doing so.
Have you explored appropriate arrangements with the identified repository where your data will be deposited?	No, because the chosen repository, Zenodo (where the QUANTIFY Community is already active), is recognized as a standard from the EC. Indeed, the OpenAIRE project, in the vanguard of the open access and open data movements in Europe was commissioned by the EC to support their nascent Open Data policy by providing a catch-all repository for EC funded research. CERN, an OpenAIRE partner and pioneer in open source, open access, and open data, provided this capability and Zenodo was launched in May 2013.
Does the repository ensure that the data is assigned an identifier? Will the repository resolve the identifier to a digital object?	Yes, all data sets deposited on Zendo are assigned a unique persistent identifier (DOI). Yes, it will. For more information about Zenodo records: https://help.zenodo.org/docs/deposit/about-records/#:~:text=Zenodo%20will%20automatically%20register%20a,reproducibility%20and%20attribution%20of%20credit.
Data	
Will the data be made openly available? In addition, experimental data from genome analyses will be also stored on the public repository of the university (Name of the repository + link) which allows free open access and has the necessary safety measures in place.	Experimental data related to public deliverables will be made openly accessible via Zenodo. Fabrication data will remain confidential due to the protection of IP.
If an embargo is applied to give time to publish or seek protection of the intellectual property (e.g. patents), specify why and how long this will apply, bearing in mind that research data should be made available as soon as possible.	Embargo period is not foreseen. Public data will be made open-access as soon as they are available and validated by the authors, whereas confidential will remain confidential.
Will the data be accessible through a free and standardized access protocol?	Yes, they will.
If there are restrictions on use, how will access be provided to the data, both during and after the end of the project?	If some data/research outputs will have restricted access, access will only be provided after personal contact to the authors via the repository interface. If necessary, open access will not be provided to some of the data/research output due to IPR consideration (e.g. whilst a patent application is pending, data arising from stakeholder engagement activities containing commercially sensitive content). Pre-processed data will not be provided unless there is a clear reason for doing so.
How will the identity of the person accessing the data be ascertained?	The Consortium will define procedures to identify the person accessing the data if deemed necessary.
Is there a need for a data access committee (e.g. to evaluate/approve access requests to personal/sensitive data)?	No, there is not, the General Assembly will handle all cases raised.
Metadata	
Will metadata be made openly available and licenced under a public domain dedication CC0, as per the Grant Agreement? If not, please clarify why. Will metadata contain information to enable the user to access the data?	Yes, they will. Metadata associated with non-confindential data will be made openly available under the standard licence (CC0). Yes, the metadata will contain information to enable the user to access the data.
How long will the data remain available and findable? Will metadata be guaranteed to remain available after data is no longer available?	Public data and associated metadata deposited on Zenodo will remain available and findable as long as the Zenodo repository exists (at least 20 years).

www.quantify-project.eu

Will documentation or reference about any software be needed to access or read the data be included? Will it be possible to include the relevant software (e.g. in open source code)?	Data will be published using standard file formats (txt, pdf, csv, etc.). All data will be accessed using standard tools. It is not foreseen that special software will be required to access the data. However, if necessary, information on software to access and read the data will be included in the metadata as well as the required open source to access and analyse the data.

3.3   Interoperable

Making data interoperable: questions	QUANTIFY data
What data and metadata vocabularies, standards, formats or methodologies will you follow to make your data interoperable to allow data exchange and re-use within and across disciplines? Will you follow community-endorsed interoperability best practices? Which ones?	The Data Management Plan must assess data interoperability following the FAIR Data Management Guidelines for the QUANTIFY project. This involves specifying the data and metadata vocabularies [DSX_QUANTIFY_*DataSetName*], standards, or methods utilized to ensure interoperability, which can be challenging for researchers, particularly in the initial stages. Therefore, this aspect will be addressed in subsequent DMP updates, once datasets and formats are more comprehensively understood.
In case it is unavoidable that you use uncommon or generate project specific ontologies or vocabularies, will you provide mappings to more commonly used ontologies? Will you openly publish the generated ontologies or vocabularies to allow reusing, refining or extending them?	If necessary, yes, we will provide mappings to more commonly used ontologies, and we will publish the generated ontologies or vocabularies.
Will your data include qualified references to other data (e.g. other data from your project, or datasets from previous research)?	Yes, they will.

3.4   Re-usable

Increase data re-usable: questions	QUANTIFY data
How will you provide documentation needed to validate data analysis and facilitate data re-use (e.g. readme files with information on methodology, codebooks, data cleaning, analyses, variable definitions, units of measurement, etc.)?	All required information needed for generation/validation/interpretation/re-use of results will be provided as short README files, attached to the deposited data sets in Zenodo. These files will include information on used tools, software, instruments and other relevant information to enable analysis and re-use. The data will be in a common format and will be readable using widely available software (open source or commercial). Any data published in open-access journals will be usable by third parties after the datasets are put in a trusted repository. The data that do not relate to peer-reviewed publications will be made available for re-use on a case-by-case basis. Important raw data for scientific publications will be uploaded to ZENODO (Creative Commons Attribution 4.0 license), which guarantees data preservation for at least 20 years.
Will your data be made freely available in the public domain to permit the widest re-use possible? Will your data be licensed using standard reuse licenses, in line with the obligations set out in the Grant Agreement?	All non-confidential data will be made freely available via the Zenodo repository to allow the widest re-use possible. They will be licensed under the standard reuse license (CC BY 4.0) as per the Grant Agreement.
Will the data produced in the project be useable by third parties, in particular after the end of the project?	Yes, all the public data, under a CC BY 4.0 licence, will be useable by third parties after the end of the project.

Will the provenance of the data be thoroughly documented using the appropriate standards?	Yes, it will.
Describe all relevant data quality assurance processes.	*More information about the data quality assurance processes will be provided within the foreseen upgrade of this document: D1.4 – Project activity and management report (**M24**).*
Further to the FAIR principles, DMPs should also address research outputs other than data, and should carefully consider aspects related to the allocation of resources, data security and ethical aspects.	Yes.

4. Other research outputs

Other research outputs: questions	QUANTIFY data
In addition to the management of data, beneficiaries should also consider and plan for the management of other research outputs that may be generated or re-used throughout their projects. Such outputs can be either digital (e.g. software, workflows, protocols, models, etc.) or physical (e.g. new materials, antibodies, reagents, samples, etc.).	Models for simulations will be developed in the project. The minimum code needed to reproduce results shown in the publications will be uploaded on Zenodo, together with the datasets. Relevant pieces of softwares can be uploaded on other dedicated repositories (such as Github). The access to the models will remain available as long as Zenodo repository is available. The Consortium will refine these procedures within the upgrade of this document.
Beneficiaries should consider which of the questions pertaining to FAIR data above, can apply to the management of other research outputs, and should strive to provide sufficient detail on how their research outputs will be managed and shared, or made available for re-use, in line with the FAIR principles.	

5. Allocation of resources

In this section the responsibility for data management and the related costs are highlighted.

5.1   Cost for making QUANTIFY data FAIR

Cost for making data FAIR: questions	QUANTIFY data
What will the costs be for making data or other research outputs FAIR in your project (e.g. direct and indirect costs related to storage, archiving, re-use, security, etc.)?	Confidential data will be stored on internal data servers managed by each partner involved. Costs for the management and maintenance of these datasets will be covered internally for each partner involved. Costs associated with depositing non-confidential data on Zenodo (i.e. personnel costs) will be charged to the project. Costs associated with the maintenance of the data on Zenodo are zero. ZENODO currently accepts up to 50GB per dataset for free. These information are constantly updated on the ZENODO FAQ page, within the section Policies. Furthermore, cost for making data FAIR will be kept to a minimum by using: i) ZENODO as suitable trusted platform, that will allow free access to the data, including its long-term preservation, at effectively zero financial outlay, ii) repository hosted by the respective institutions, and iii) by making only relevant data and outputs FAIR.
How will these be covered? Note that costs related to research data/output management are eligible as part of the Horizon Europe grant (if compliant with the Grant Agreement conditions).	At this preliminary stage of the project, the only costs foreseen for data management are related to: - the working time needed to set up and perform the data collection, including synchronization of devices and analysis activities. - the working time to set up local and shared data collection devices/servers. - the working time needed to write documentation, metadata, etc. The repository chosen for long-term data sharing and preservation (e.g., Zenodo) offers free data archiving up to 50 GB per dataset, which is enough given the expected data volume. Costs for purchasing hardware support for storage and backup will be covered by the project.

5.2   Responsibilities for data management in the project

Responsibilities for data management: questions	QUANTIFY data
Who will be responsible for data management in your project?	Every partner has a person responsible for data management generated in-house. Indeed, data management rests solely with the consortium partner generating or collecting the data in question. A quality assurance process will be pursued within the duration of the project. Each partner has the responsibility to make sure their activities are in line with all applicable local, government and international laws, regulations and guidelines. Each Partner producing datasets is responsible for preparing the datasets to make FAIR the data collected within its own activities. The Project Coordinator is responsible for general coordination and supervision. The DMP will be led by the coordinator with the support of all the WP Leaders. The consortium will discuss a first draft of the DMP at the project kick-off meeting. Each project meeting will include an agenda item on the DMP. In particular, the first version of DMP will be released at M6 (D1.2 M06), it will be updated at M24 (D1.5 M24) and at M42 (D1.7 M42) to give evidence of any advances and changes in the data management policies. The DMP will be publishable and will be shared through the QUANTIFY website and trusted repositories.
How will long term preservation be ensured? Discuss the necessary resources to accomplish this (costs and potential value, who decides and how, what data will be kept and for how long)?	Data published on Zenodo will remain available for the entire lifetime of the repository (at least 20 years).

6. Data security

Data security: questions	QUANTIFY data
What provisions are or will be in place for data security (including data recovery as well as secure storage/archiving and transfer of sensitive data)?	All data, confidential and non-confidential, will be stored on internal data server with appropriate safety measures put in place for the purpose of safe storage and potential data recovery.
	Due to the potential commercial value associated with intellectual property (IP) protection, sensitive data sharing will be restricted to avoid potential impacts on IP protection activities, especially regarding patent filings.
	Background and results will be shared with other project partners for exploitation purposes under fair and reasonable conditions, if necessary for using their results. In case of commercialization opportunities, all partners with relevant intellectual property will be involved in negotiations.
	Further publication and dissemination will adhere to EU procedures, including a prior assessment of commercial exploitability. Results that are not patentable or already protected by other intellectual property deeds will either be kept confidential (as know-how) or disseminated online, at conferences, and meetings, with acknowledgment of EC support.
	Exploitable results will be managed through various means such as patents, licenses, copyrights, Creative Commons licenses, consulting, services, collaborative projects, or spin-off creation. The Project Coordinator will assist in identifying the best approach for valorization, with regular review of exploitable results, risk analysis, and IPR benchmarks at General Assembly and Executive Board meetings.
Will the data be safety stored in trusted repositories for long term preservation and curation?	Storage and archiving of data on internal data servers and on trusted repository like Zenodo will guarantee their long-term preservation and curation.

7. Ethical issues

Ethics: Questions	QUANTIFY data
Are there, or could there be, any ethics or legal issues that can have an impact on data sharing? These can also be discussed in the context of the ethics review. If relevant, include references to ethics deliverables and ethics chapter in the Description of the Action (DoA).	The project fully complies with the data protection principles of lawfulness, fairness, and transparency in data processing, as well as purpose limitation, data minimization, accuracy, integrity, confidentiality, and fully agrees that the protection of personal data is a priority.
Will informed consent for data sharing and long term preservation be included in questionnaires dealing with personal data?	Yes, it is.

8. Other issues

Other issues: questions	QUANTIFY data
Do you, or will you, make use of other national/funder/sectorial/departmental procedures for data management? If yes, which ones (please list and briefly describe them)?	No, the Consortium will not use other national/funder/sectorial/departmental procedures for data management.

Annex 1 – Datasets

Dataset name	DS1_QUANTIFY_ProjectConsortium
Partner in charge	INRiM
WP/Task	WP1 / T1.2
Goal	Coordination and project management
Data origin	Data generated from all the Consortium Partners
Dataset type	List of the researchers involved in the project
Estimated size	5 KB
File formats	.xlsx

Dataset name	DS2_QUANTIFY_GeneralAssembly
Partner in charge	INRiM
WP/Task	WP1 / T1.2
Goal	Coordination and project management
Data origin	Data generated from all the Consortium Partners
Data type	List of the General Assembly members and their deputies
Estimated size	5 KB
File formats	.xlsx

Dataset name	DS3_QUANTIFY_ExecutiveBoard
Partner in charge	INRiM
WP/Task	WP1 / T1.2
Goal	Coordination and project management
Data origin	Data generated from all the Consortium Partners
Data type	List of the Executive Board members and their deputies
Estimated size	5 KB
File formats	.xlsx

Dataset name	DS4_QUANTIFY_MTP
Partner in charge	UGent- CSEM- Thales/CNR
WP/Task	WP2, Task 2.1, 2.2, 2.3, 2.5
Goal	Realization of uTP of LNOI and GaP structures on SiN to deliver the PICSq and nano-OMO
Data origin	Experimental Data
Data type	Metadata
Estimated size	10GB
File formats	.gds, .py , .fsp., .txt and .jpeg or .png formats

Dataset name	DS5_QUANTIFY_OPM
Partner in charge	ICFO
WP/Task	WP3
Goal	Develop a miniaturized quantum enhanced OPM with PIC and MEMS components
Data origin	Data generated by WP3 partners
Data type	Various experimental data
Estimated size	5GB
File formats	.gds, .py , .fsp., .txt and .jpeg or .png formats

Dataset name	DS6_QUANTIFY_TPOC
Partner in charge	CSEM
WP/Task	WP4
Goal	Develop a miniaturized quantum enhanced TPOC with PIC and MEMS components
Data origin	Experimental Data
Data type	Phase and Frequency data files. Images, drawings, vectorial data and metadata
Estimated size	From 1 kB to 100 MB
File formats	File formats include, but are not limited to, ASCII, .txt, .csv.

Dataset name	DS7_QUANTIFY_OMT
Partner in charge	SU
WP/Task	WP5
Goal	Develop an OMT based on a photonics and phononics crystal
Data origin	Mechanical characteristics of optical and mechanical devices versus temperature.
Data type	Table, spectrum
Estimated size	500MB
File formats	Mainly .txt, .csv

| Dataset name	DS8_QUANTIFY_MetrologicalAssessment_OMT
Partner in charge	INRiM
WP/Task	WP6 / T6.3 and T6.4
Goal	Measurements and calibration of the optomechanical thermometer (OMT)
Data origin	Data generated from WP5 and WP6 Partners
Data type	Characterization results of the OMT compared to the primary reference
Estimated size	500 MB
File formats	.xlsx, ASCII, .txt, .csv

Dataset name	DS9_QUANTIFY_MetrologicalAssessment_OPM
Partner in charge	INRiM
WP/Task	WP6 / T6.5 and T6.6
Goal	Measurements and calibration of the optically pumped magnetometer
Data origin	Data generated from magnetometers
Data type	Characterization results of the OPM compared to the primary reference
Estimated size	1 MB
File formats	.dat or .txt (ASCII format)

Dataset name	DS10_QUANTIFY_MetrologicalAssessment_TPOC
Partner in charge	INRiM
WP/Task	WP6 / T6.7 and T6.8
Goal	Measurements and calibration of the optical clock
Data origin	Data generated by WP6 partners
Data type	Characterization results of the TPOC compared to the Italian primary clock IT-CsF2 and Italian optical clock IT-Yb1. Data will contain phase and frequency data of the OC/IT-CsF2/IT-Yb1 comparison. Datasets will consist of experimental timeseries, and will be accompanied by metadata and minimum code for independent analysis.
Estimated size	< 1 GB
File formats	.DAT or .txt (.py for code)

Dataset name	DS11_QUANTIFY_Squeezed_Light_Evaluation
Partner in charge	UHAM
WP/Task	WP 6/Task 6.1
Goal	Characterize the squeezed light source in terms of Spectra, Zero-Span measurement and loss analysis.
Data origin	Generated by UHAM staff
Data type	Experimental data (Numerical data sets and graphics)
Estimated size	50 MB
File formats	.DAT, .xlsx, .txt (ASCII format), .csv

Dataset name	DS12_QUANTIFY_Homodyne_Detector_Evaluation
Partner in charge	UHAM
WP/Task	WP 6/Task 6.1
Goal	Characterize the newly developed balanced detector in terms of Dark Noise Spectra and linearity measurements.
Data origin	Generated by UHAM staff
Data type	Experimental data (Numerical data sets and graphics)
Estimated size	50 MB
File formats	.DAT, .xlsx, .txt (ASCII format), .csv

Dataset name	DS13_QUANTIFY_CommunicationDisseminationExploitationActivities
Partner in charge	INRiM
WP/Task	WP7 / T7.1 and T7.2
Goal	Dissemination, exploitation and impact
Data origin	Data generated from all the Consortium Partners
Dataset type	List of the Communication, Dissemination, and Exploitation activities during the project lifetime
Estimated size	5 KB
File formats	.xlsx
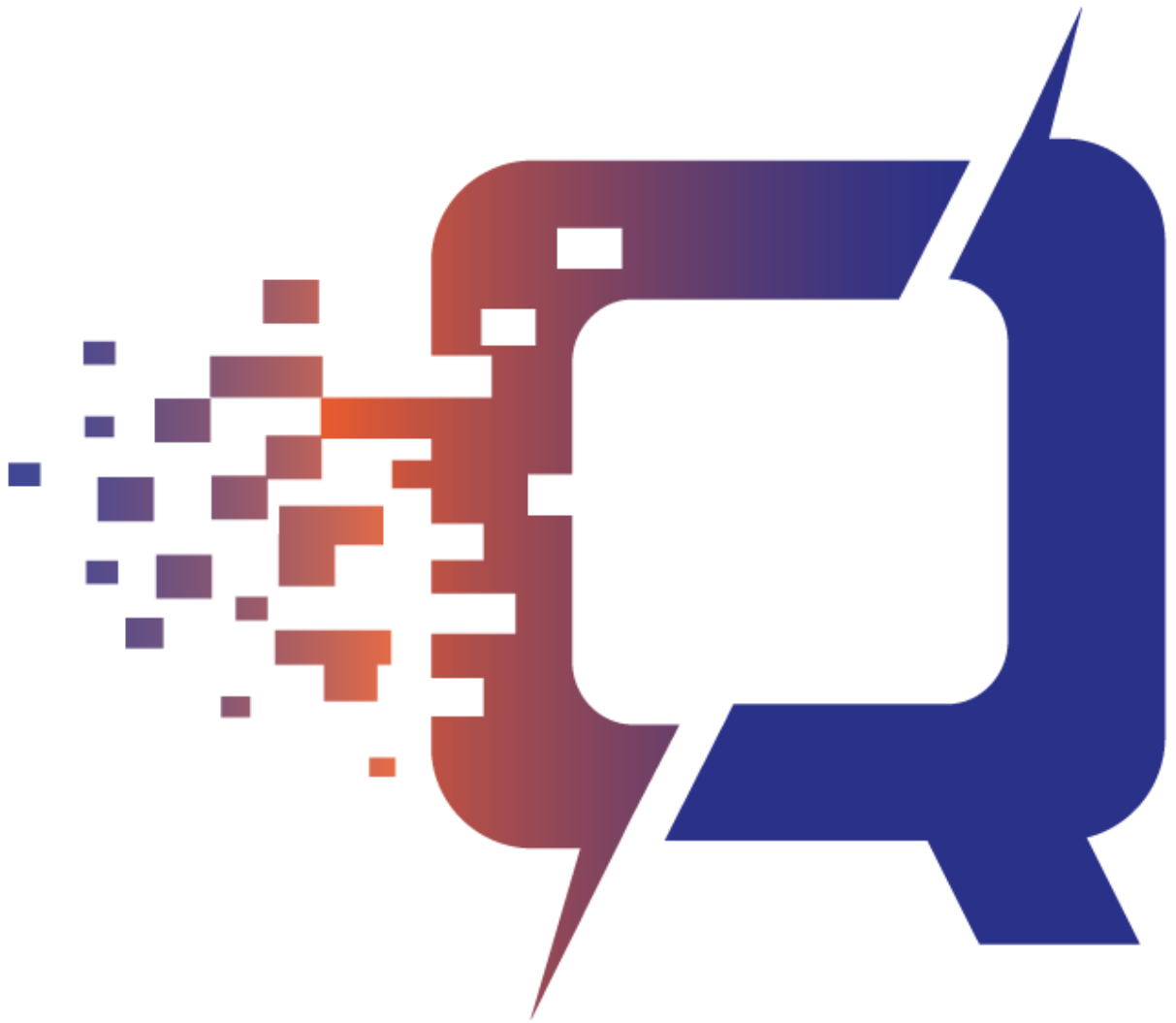
QUantum Enh**AN**ced
Pho**T**onic **I**ntegrated Sensors
For Metrolog**Y**