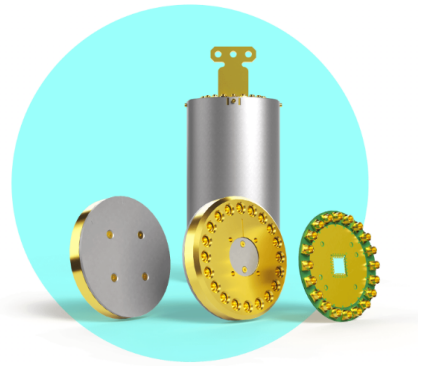
Datasheet, YQ-QP-20A
20 RF-Port Sample Box



Quantum Device Packaging
Sample Box with RF-PCB

Key Features – Sample Box 20-RF

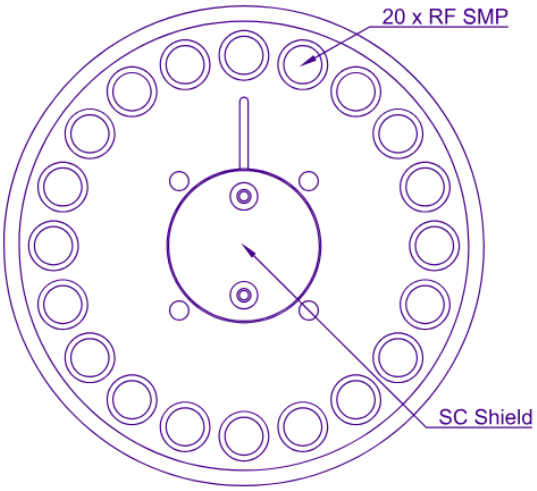
- 20 RF-ports (SMP)
- Fully light-tight chip enclosure with magnetic shielding
- RF-PCB with a 10×10 mm chip cutout, and optimized for a 500 µm chip thickness
- Low-loss, low-crosstalk 4-layer RF-PCB
- Non-magnetic components only
- Sample box resonance frequencies above 15 GHz
- *Optional:* Nickle-free gold plating of all copper parts

Typical Performance

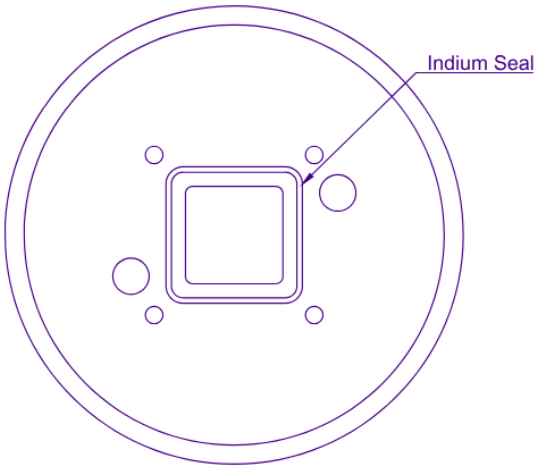
RF frequency	DC - 12 GHz
PCB insertion loss	< 1.0 dB
PCB return loss	> 15.0 dB

PCB crosstalk	< -52.0 dB
Box mode freq.	> 15.0 GHz
Sample size	10.0 x 10.0 mm

Drawing Sample Box [mm]

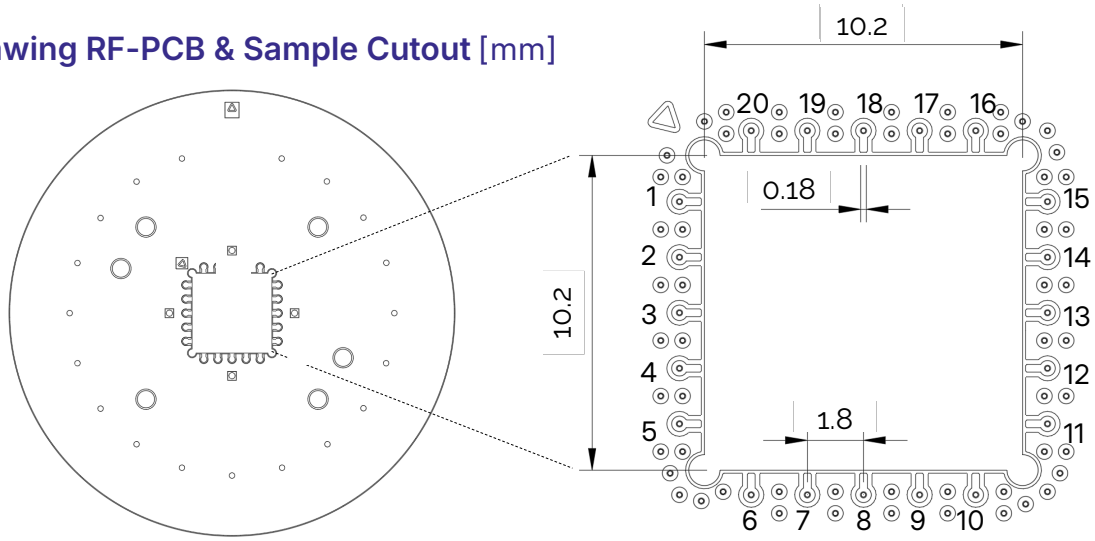


Top Sample Holder (Copper C101)



Bottom Al. Cover (Al. 1050)

Drawing RF-PCB & Sample Cutout [mm]

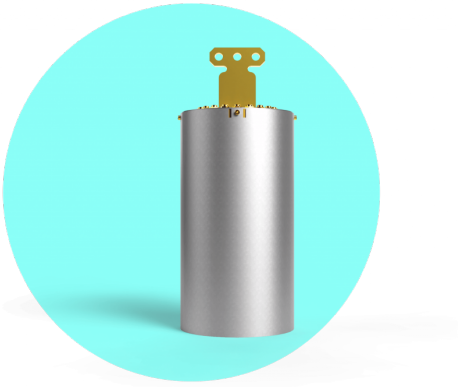


 https://www.yquantum.ch/ info@yquantum.ch

Datasheet, YQ-QP-20A
20 RF-Port Sample Box

Key Features – Cold Finger & Shielding

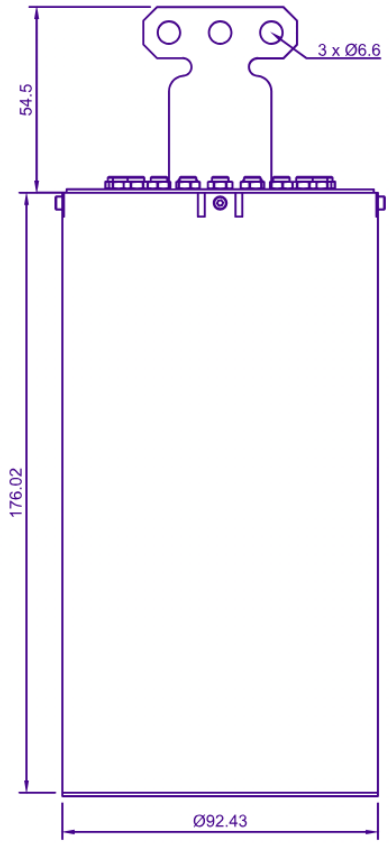
- 20 RF-ports with SMP connectors
- Fully light-tight cable feedthroughs
- Mu-metal and Aluminum shields (with flange)
- Direct thermalization using OFHC copper parts
- Coldfinger mounting brackets for different cryostats available
- Possibility to host 1 x 20-port sample box or 2 x 8-port sample boxes
- Optional: Nickle-free gold plating of all copper parts



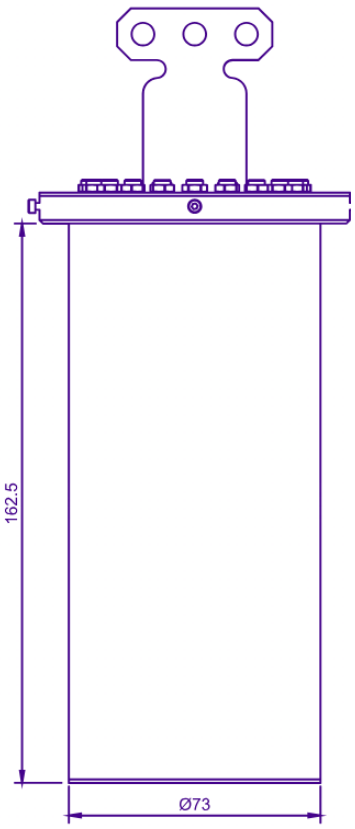
Quantum Device Packaging
Coldfinger & Shielding

Drawing Coldfinger & Shielding [mm]

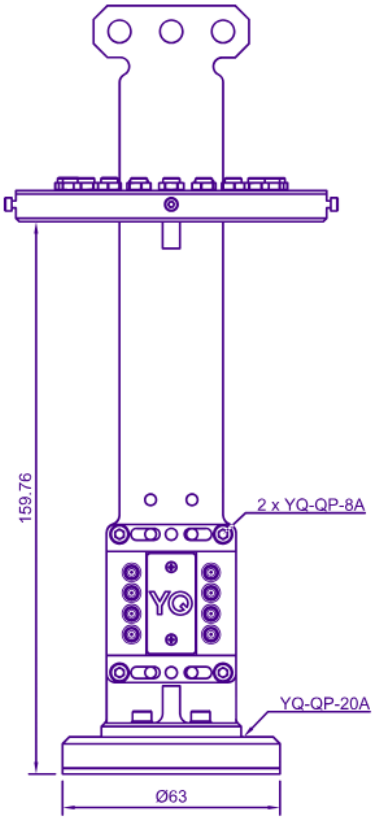
Mu-Metal Shield (A4K, 0.04'')



SC-Shield (Al. 1050)



Coldfinger



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