

# Linear Telescopic Transfer Arm

## LTTA - Compact Sample Transfer Arm

Telescoping transfer arm with 914mm travel, specifically designed for use in situations where installation space is a limiting factor or a compact system footprint is desired.

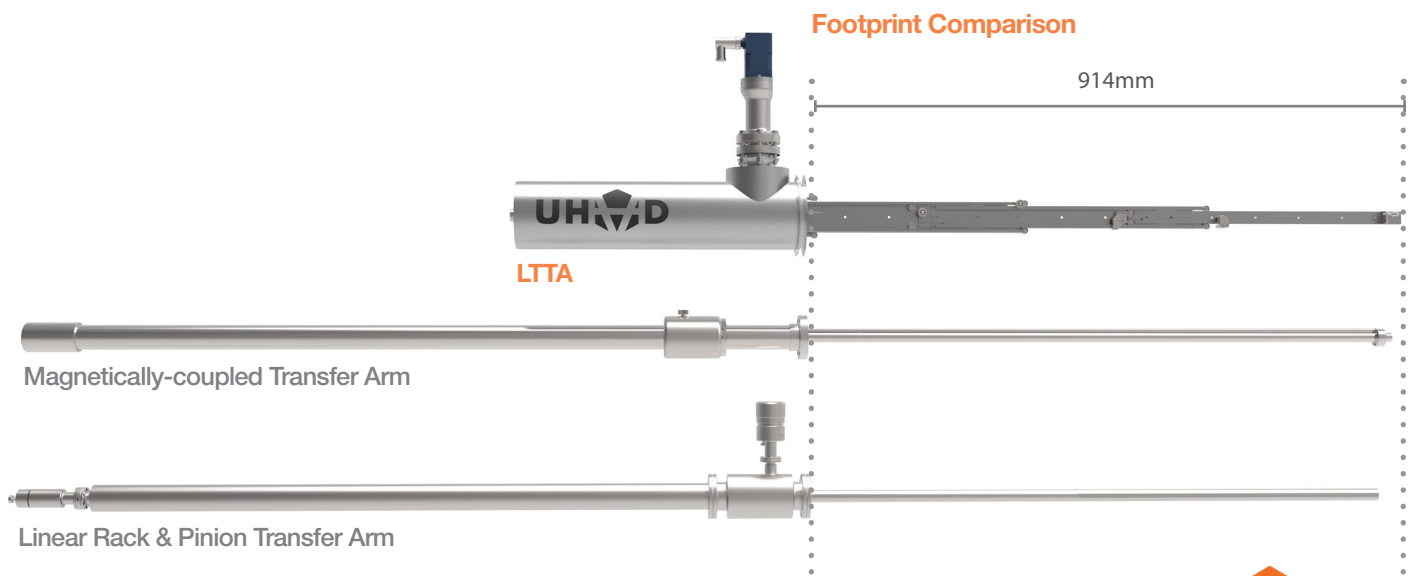
Available with options for 20mm of arm lift/lower, motorised actuation and choice of Fast Entry Loadlock.

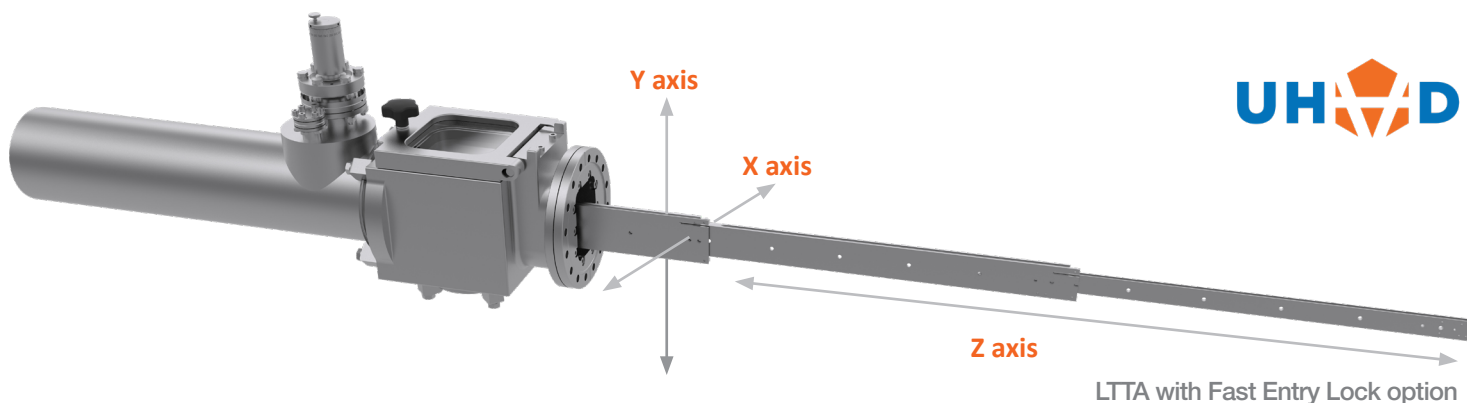
### LTTA KEY ADVANTAGES

- » Ultra-compact footprint
- » Up to 914mm extension
- » Fast Entry Loadlock options
- » 20mm lift/lower option
- » Low vertical deflection under load

The Linear Telescopic Transfer Arm (LTTA) utilises an innovative wire driven telescopic arm mechanism to provide up to 914mm of linear travel within the smallest possible footprint. Available with manual or motorised actuation and additional 20mm arm lift/lower option to facilitate sample hand-off. With less than 3.0mm vertical deflection under a 5.0N load the LTTA is a compact alternative to conventional magnetically-coupled transfer arms.

The LTTA can be supplied complete with a Fast Entry Lock (FEL) for convenience.





LTTA TECHNICAL DATA	
Mounting flange options - LTTA only	CF100, ISO-K 100, CF 150, ISO-K 160
Mounting flange options - LTTA + Fast Entry Lock chamber	CF100, ISO-K 100, CF150, ISO-K 160, CF200, ISO-K 200, CF250, ISO-K 250
Fast Entry Lock chamber options [internal dimensions]	FEL sample holders up to 2" diameter [112mm x 100mm x 100mm] FEL sample holders up to 6" diameter [112mm x 183mm x 182mm]
Fast Entry Lock pumping port	ISO-K 63
LTTA arm extension	914mm
Lift/Lower option	20mm
Linear positional repeatability (Z Axis)	<+/-0.5mm at 914mm extension
X & Y repeatability	<+/-0.5mm at 914mm extension
Vertical deflection (absolute)	
2.5N load	<2.0mm variance during 914mm extension
5.0N load	<4.0mm variance during 914mm extension
Horizontal deflection (absolute)	
2.5N load	<3.0mm variance during 914mm extension
5.0N load	<3.0mm variance during 914mm extension
Maximum unload deflection	
2.5N load	<1.5mm at 914mm extension
5.0N load	<3.0mm at 914mm extension
Arm extension actuation options	Manual, Stepper Motor or SMART (DC) Motor, Limit Switches
Arm Lift/Lower actuation options	Manual, Stepper Motor or SMART (DC) Motor, Limit Switches
Maximum recommended transfer speed	<85mm/s
Recommended transfer speed	30mm/s
Maximum Load on arm	0.5Kg
Side Load Deflection	
0.8N (typical flag parking load/unload)	<4mm
Max recommended side load	3N
Magnetic field	~400mGauss (earths ambient field) >50mm from rotary drive
Maximum Bakeout Temperature	200°C

### For more information:

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