# CubeSat Deployers

Flight heritage since 2013





#### **DESCRIPTION**

The QuadPack, DuoPack and ISIPOD deployers are the world-leading and most flown CubeSat launch adapters, developed by ISIS - Innovative Solutions In Space to accommodate CubeSats onboard a large variety of launch vehicles, through ISIS' turn-key ISILaunch Services, or with tailored integration support. The QuadPack and ISIPOD deployer product lines can accommodate any type of CubeSat or nanosatellite, from 1U, 2U, 3U, 6U up to 12U and 16U, while custom formats and volumes can be quickly realized. Each ISIS deployer provides simple, well defined interfaces towards the CubeSats internally and the launch vehicle externally, with an optimized balance between internal versus external volume and payload versus deployer mass. All ISIS deployers are fully qualified with flight heritage on 6 different launch vehicles so far.

### ISIPOD product line

#### **FEATURES**

- No charging needed, does not contain batteries
- Allows for up to 9.0 mm side volume and a large "tuna can"
- FAR/ITAR free design
- Redundant deployment signals
- Easily resetable Hold Down and Release Mechanism
- Long storage life
- Cubesat umbilical interface connector available as special option







	1-Unit ISIPOD	2-Unit ISIPOD	3-Unit ISIPOD		
MOUNTING OPTIONS	Parallel	Parallel	Parallel		
PROPERTIES					
Deployer Mass Maximum Payload Mass Payload Volume (examples)	1.5kg 2kg 1 x 1U	1.75kg 4kg 1 x 2U 2 x 1U	2kg 6kg 1 x 3U 3 x 1U 1 x 2U + 1 x 1U		
AVAILABILITY	Sold separately	Sold separately	Sold separately		
FLIGHT HERITAGE  Year  Vehicles	since 2013 Vega	since 2015 PSLV	since 2013 PSLV, Antares, Soyuz, Dnepr, LM-2D, Atlas V, LM-11		

#### **QUALIFICATION OVERVIEW**

Test	Q
Functional	✓
Vibration	✓
Mechanical Shock	$\checkmark$
Thermal Cycling	$\checkmark$
Thermal Vacuum	✓

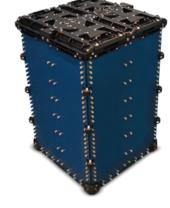
\*Levels available on request, ECSS/NASA GEVS compatible



## **QUADPACK** product line

- No charging needed, does not contain batteries
- Allows for up to 10.0 mm side volume and a large "tuna can"
- FAR/ITAR free design
- Redundant deployment and telemetry signals
- Dynamic rail system clamps satellites inside for best load transfer
- Ultra light burnwire based Hold Down and Release Mechanism
- Access hatches in the door to allow for umbilical connection







6-Unit DuoPack\*

12-Unit QuadPack\*

16-Unit QuadPack

Parallel	Parallel and perpendicular	Parallel and perpendicular		
4kg - 4.5kg 12kg	6 - 7.5kg 24kg	7.5 - 9kg 24kg		
1 x 6U 2 x 3U	1 x 12U 2 x 6U 4 x 3U	1 x 16U 2 x 8U 4 x 4U		
Sold in combination with ISILaunch Services or integration support *also available in XL variant	Sold in combination with ISILaunch Services or integration support *also available in XL variant	Sold in combination with ISILaunch Services or integration support		
since 2015 PSLV, LM-2D, Minotaur-C	since 2014 Dnepr, PSLV, Soyuz, Falcon 9	Manifested		

#### **LAUNCH CANISTER CONFIGURATIONS**

ISIPOD	10		<b>2</b> U		3U		
DuoPack	<b>3</b> U	3U	61	U			
QuadPack 12U	3U	3U	6U		<b>6</b> U	<b>12U</b>	
	<b>3</b> U	3U	3U	3U	<b>6</b> U		
QuadPack 16U	4U	4U	8	U	8U	16U	
	<b>4</b> U	4U	<b>4</b> U	<b>4</b> U	8U		

#### **SUPPORTED CUBESAT SIZES**

The supported ISIS 'standard' CubeSat sizes and envelopes for both its CubeSat Structures product line and its CubeSat deployer product line are outlined below.



#### **CUSTOM SOLUTIONS**

ISIS' CubeSat deployers are available in a variety of sizes ranging from 1U up to 16U. However, as every mission is unique, if one of our standard deployers does not fit your mission requirement, ISIS can develop custom solutions that meet any project specification.



This document is subject to change without notice. Latest information is on www.isispace.nl



