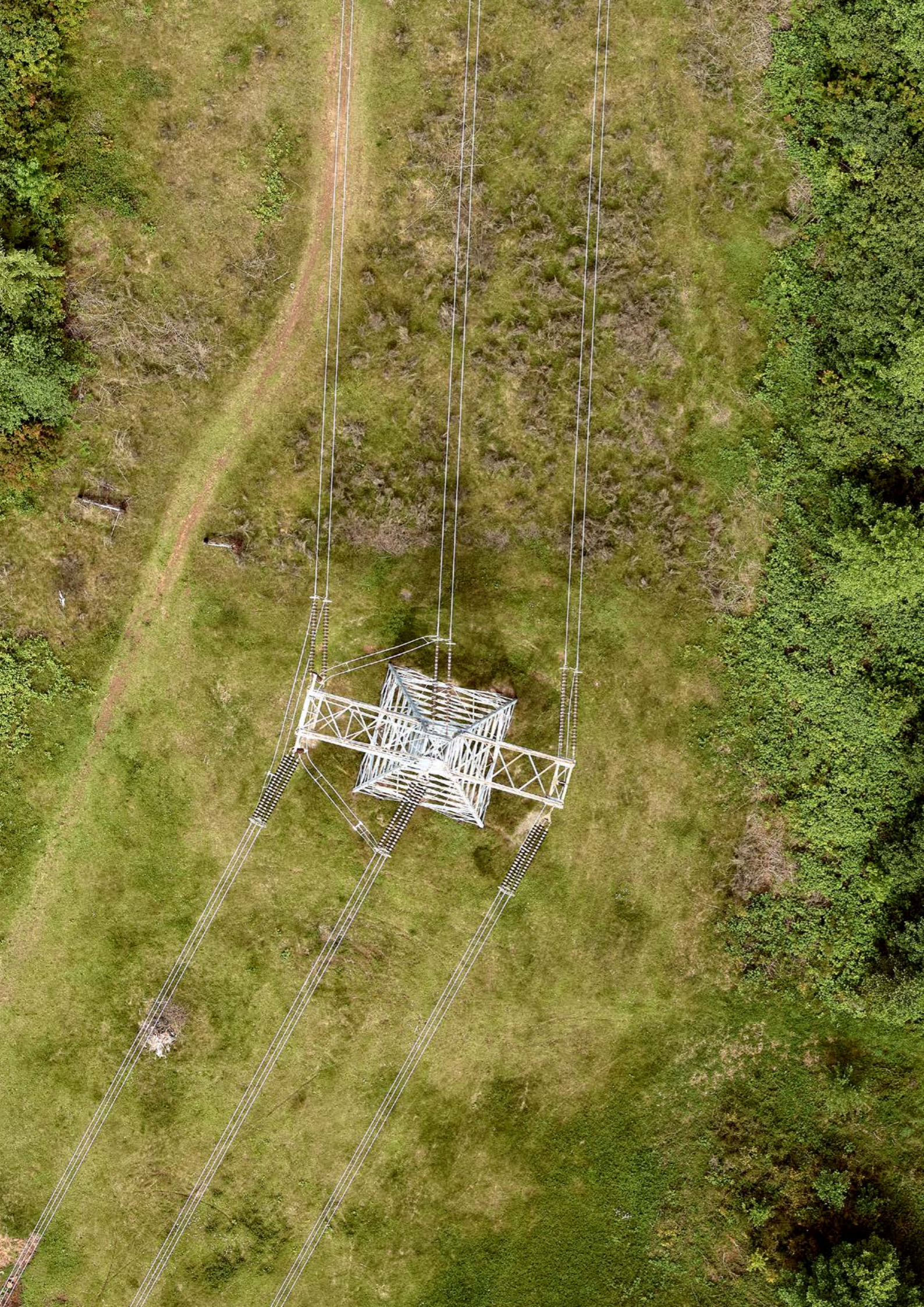PHASE**ONE**

P3 UAV Payload
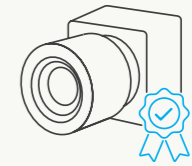
Unmatched inspection productivity

The finest details from
the furthest distance

To deliver unmatched performance, Phase One P3 is designed to maximize the productivity of the most demanding inspection projects where time, safety, and image details are paramount for success.

Ready-for-flight with DJI M300/350 and ready-for-integration with MAVLink drones, the P3 boosts your inspection productivity through its ease of installation, superior data output, and uncompromised image details.
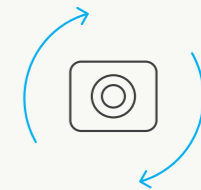
Featuring a medium-format Phase One iXM camera with a sensor 1.7 times larger than other cameras, the P3 excels at capturing more details in each frame.

P3 offers you the advantage of unparalleled dynamic range and a versatile selection of lenses, spanning from 35 mm to 150 mm*.

Best-in-class sensor performance
Make the most of every flight by capturing more in every shot with the largest image sensor.
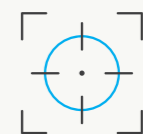
Flexible configuration for every need
Get more value out of your inspection by switching between vertical and horizontal configurations to collect data faster and reduce background noise.

More details from a distance
Get detailed data from the safest distance while covering a large area choosing from variety of our lenses.

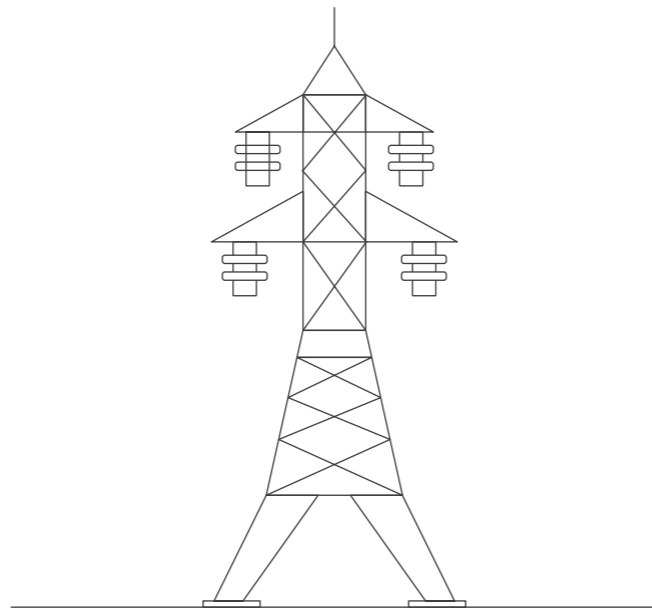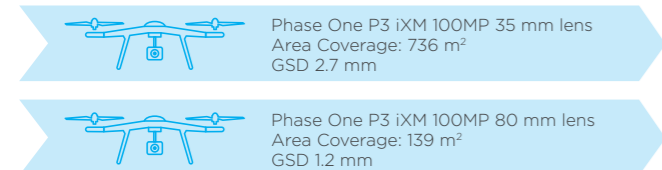### Smart capture for robust results
Make every shot count capturing easily complex assets and moving objects with smart focusing and triggering.

* 150 mm lens not supported for DJI M300/M350
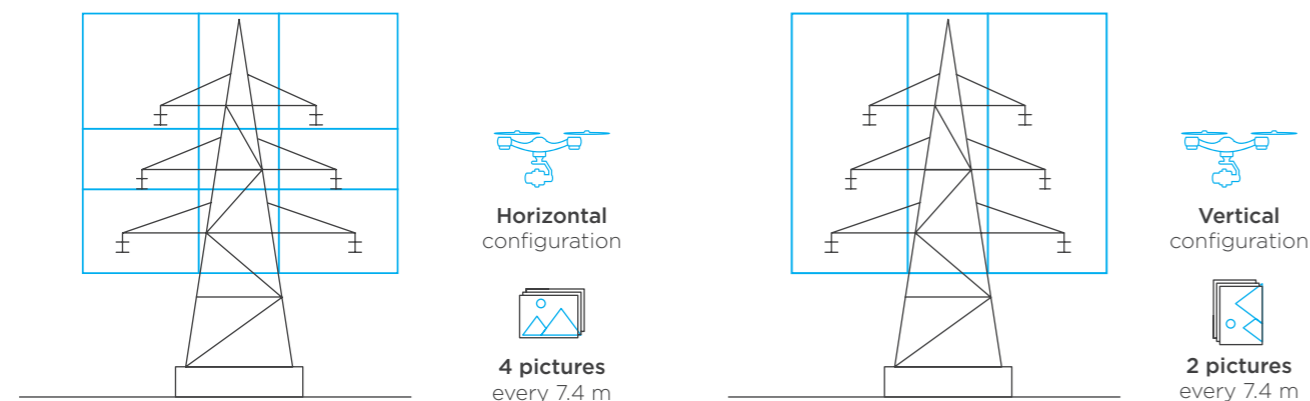
Make no compromises
on image quality

Customize your drone to meet your project requirements

By offering a variety of lens options you can customize your drone according to your priorities; whereas you want to achieve the broadest coverage or the finest detail.

Phase One P3 iXM 100MP 35 mm lens
Area Coverage: 736 m^2
GSD 2.7 mm

Phase One P3 iXM 100MP 80 mm lens
Area Coverage: 139 m^2
GSD 1.2 mm

25 m Safety distance

Boost your productivity with flexible configuration

Depending on the type of asset to inspect, you can switch your P3 configuration from horizontal to vertical and vice versa to reduce background noise and collect data faster.

Horizontal configuration

4 pictures every 7.4 m

Vertical configuration

2 pictures every 7.4 m

Flexible camera configuration

Vertical and horizontal camera orientation.

End-to-end integration

P3 Payload can easily be integrated with the most recognized UAV systems DJI M300/350, MAVLink and Auterion.

Versatile platform support

Interface to DJI, Auterion and MAVLink UAVs or use the Phase One toolbox for seamless integration with your existing workflows.

Smart focusing

Built-in laser range finder to ensure consistent focus in complex and high contrast situations.

Smart triggering

Automatic and continuous distance measuring triggering a capture for fast moving objects.

Wide range of lenses

35, 80 and 150 mm lenses, to meet your GSD requirements from any distance without compromising on safety.

3-Axis stabilization

Pitch and yaw control of the gimbal providing better image stability.

Medium format sensor

120 & 100 MP sensors ensure largest coverage, highest dynamic range, and smallest GSD.

P3 payload deliveres
unmatched perfomance

Image sensor & camera	P3 DJI	P3 MAVLink
Weight kg with 80 mm AF lens without payload mount	2.5	2.5
Sensor	Medium format sensor iXM-100 iXM-GS120 (electronic Global Shutter)	Medium format sensor iXM-100 iXM-GS120 (electronic Global Shutter)
Environmental rating	IP53 (iXM only)	IP53 (iXM only)
Gimbal stabalization	3 axis	3 axis
Laser range finder (max effective range)	Approximately 90 m	Approximately 90 m
Camera control (key features)	ISO, shutter speed, exposure, AE, focus distance AF/MF, LRF range max/min, focus peaking	ISO, shutter speed, exposure, AE, focus distance AF/MF, LRF range max/min, focus peaking
Camera control (metadata)	EXIF (incl. IMU & Custom Field), ICC Profile, XMP (incl. GPS) & IPTC	EXIF (incl. IMU & Custom Field), ICC Profile, XMP (incl. GPS) & IPTC
Live view	HDMI	HDMI
Camera orientation	Vertical and horizontal	Vertical and horizontal
Smart focusing	Auto focus based on LRF input	Auto focus based on LRF input
Flight planning software	DJI pilot	Q Ground Control & Mission Planner
Electric interface	Skyport V2	HDMI, Telemetry, USB-c
Software interface	Support for PSDK & MSDK	Support for MAVLink Protocol v1 and v2
Hardware compatibility	DJI M300/350 only	MAVLink based platforms Cube Orange & PixHawk 4.0

Lenses technical specifications		35 mm	80 mm	80 mm AF	150 mm AF
Lens composition		12 elements in 8 groups	8 elements in 5 groups	8 elements in 5 groups	8 elements in 7 groups
Minimum focusing range		infinity	3 m to infinity	3 m to infinity	10 m to infinity
Shutter speed max (sec)		1/2500	1/2500	1/2500	1/2500
Exposure control		1/3 f – stop increments	1/3 f – stop increments	1/3 f – stop increments	1/3 f – stop increments
Aperture range		f/5.6 – f/22	f/5.6 – f/22	f/5.6 – f/22	f/5.6 – f/22
Filter diameter (mm)		58	58	58	58
Angle of view – long side (°)	120 MP sensor	64.4	30.8	30.8	16.7
	100 MP sensor	64.1	30.7	30.7	16.6
Angle of view – short side (°)	120 MP sensor	50.2	23.3	23.3	12,6
	100 MP sensor	50.3	23.2	23.2	12.5
Entrance pupil to image plane (mm)		72	85	85	107

RSM 35 mm f/5.6

RSM 80 mm f/5.6

RSM 80 mm AF f/5.6

RSM 150 mm AF f/5.6

MAVLink
supported drones

P3 for MAVLink supported drones is a ready-for-integration solution. It is designed to significantly reduce your time to market by fast-tracking your integration efforts. You have the freedom to customize the integration to your specific platform and application requirements.

P3 for MAVLink provides:

- Full compatibility with your MAVLink drone enabling you to offer it as a turnkey solution for new markets.
- Complete documentation of the open-source software, and electrical and mechanical interface, making the integration a breeze.
- Your choice of MAVLink Ground Control Software through the MAVLink Camera Protocol.

DJI
M300/350

The P3 Payload for DJI M300/350 is a ready-for-flight plug and play solution, that gets you started from day one, with the tools you already have, to deliver better value to your customers.

P3 for DJI M300/350 provides:

- Turnkey integration with the DJI Pilot App eliminating the need to retrain your pilots.
- Compatible with third party software via DJI Mobile SDK
- Maximum utilization and uptime of your existing M300/350 fleet by opening up new application.

About Phase One

Phase One is the global leader in digital imaging technology. Our commitment to imaging quality spans for a wide spectrum of applications, from professional photography to heritage digitization, industrial inspections, aerial mapping, security and space.

With over three decades of innovation, Phase One has pioneered core imaging technologies and a range of digital cameras and imaging modules, setting new standards for image quality in terms of resolution, dynamic range, color fidelity and geometric accuracy. Together with its customers, technology partners and its global network of distributors, Phase One drives the imaging industry forward.

We deliver Imaging Beyond Imagination.
www.phaseone.com