

**Graphica**  
CamMate  
SHOTOKU

Designed jointly with CamMate  
(purpose-built for VR production)

Shotoku high-resolution mechanical tracking encoders

SPI-6 provides VR data output to the graphics computer via RS-422 or IP for accurate productions in real time

Joystick and pistol grip operation



**Graphica 370**

# Graphica

## VR Crane for Studio and OB Applications



Joystick / pistol grip control

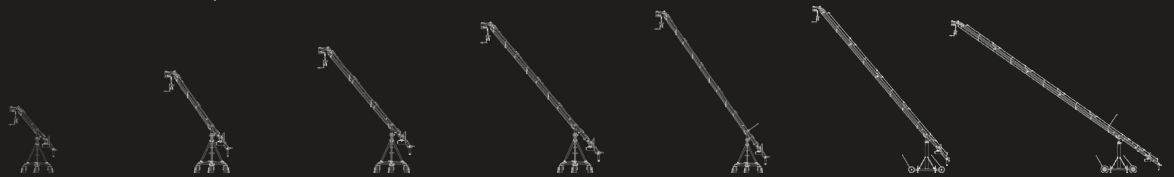


Spi-TOUCH calibration system

The Graphica Series is the fusion of superb Shotoku VR technology and the engineering know-how of the prestigious crane maker, CamMate. The result is a product with industry-leading VR tracking capabilities in a package that is portable, scalable, and stable.

Graphica calculates positional data output from embedded jitter-free physical rotary encoders designed specifically for VR applications. This means external markers and area limitations often associated with other positional tracking systems are nonexistent. Shotoku encoders seamlessly process data via the SPI interface to provide real-time data output in studio or on location.

<b>SYSTEM OVERALL LENGTH</b>	7 Models of Varying Length
<b>CAMERA PAN / TILT RANGE</b>	Pan: 360° Tilt: +75° ~ -60°
<b>ARM TILT RANGE*</b>	+60° ~ -45°
<b>CONTROL MECHANISM</b>	Joystick and Pistol Grip
<b>CONTROL/POSITION CABLES</b>	Standard 12 or 20-pin Interface Cable for Integrated Virtual Encoder Lenses
<b>RESOLUTION (HEAD PAN/TILT)</b>	640,000 counts per 360°
<b>RESOLUTION (ARM PAN/TILT)</b>	640,000 counts per 360°
<b>LENS CABLE**</b>	Zoom/focus data cable for Canon and Fujinon
<b>SPI</b>	SPI-6
<b>2PT CALIBRATION SYSTEM</b>	Spi-TOUCH (Standard)



MODEL	Graphica 250	Graphica 370	Graphica 490	Graphica 640	Graphica 770	Graphica 960	Graphica 1240
<b>SYSTEM OVERALL LENGTH</b>	2.5m (8.2ft)	3.7m (12.1ft)	4.9m (16.1ft)	6.4m (21ft)	7.7m (25.3ft)	9.6m (31.5ft)	12.4m (40.7ft)
<b>REACH</b>	1.5m (4.9ft)	2.7m (8.9ft)	3.9m (12.8ft)	5.1m (16.7ft)	6.4m (21ft)	8.1m (26.6ft)	10.0m (32.8ft)
<b>SYSTEM MAX. LENS AXIS HEIGHT</b>	2.1m	3.1m	3.9m	4.9m	6.1m	7.3m	6.8m
<b>SYSTEM MAX PAYLOAD***</b>	16 kg / 35 lbs	16 kg / 35 lbs	16 kg / 35 lbs	11.5 kg / 25 lbs	11.5 kg / 25 lbs	11.5 kg / 25 lbs	11.5 kg / 25 lbs
<b>TOTAL WEIGHT</b>	82kg / 180 lbs	86kg / 189 lbs	95.7kg / 211 lbs	102kg / 224 lbs	147kg / 324 lbs	174kg / 383 lbs	232kg / 510 lbs
<b>ESTIMATED COUNTERWEIGHT</b>	30kg / 66 lbs	81kg / 178 lbs	138kg / 305 lbs	136kg / 300 lbs	191kg / 420 lbs	270.5kg / 595 lbs	232.7kg / 512 lbs
<b>DOLLY</b>	3-Wheel	3-Wheel	3-Wheel	3-Wheel	3-Wheel	4-Wheel	4-Wheel

\* Arm tilt range varies depending on system configuration.

\*\* Lens encoder unit is available for non-virtual Canon (TY-05C) and Fujinon (TY-05F) lenses.

\*\*\* Consult your Shotoku representative for payload requirements over recommended max payload.