Scorpio 78'

The **Scorpio 78'** has been designed to be smooth, silent, fast, and with great mobility even being the longest telescopic crane with human control capacity in Film and Broadcast industry.

Range:

Using the same development line used with the **Scorpio 45'** and all the software and hardware improvements from all the **Scorpio Cranes**, Servicevision has been working to design the longer sister of the **45'** with perfect balance in measurements when retracted for transportation and when extended for range.

This balance in size is achieved by using 5 telescopic sections which also allows the **Scorpio 78'** to have the longest travelling distance in a telescopic crane. The unique design of the **Scorpio Cranes** ensures that all the sections will run smoothly even at 2.6m/s speeds. All this range of movement can be achieved with payloads of up to 60kg (132lbs.).

In case it is necessary to carry more weight, the **Scorpio 78'** offers the possibility to detach the last section increasing the payload capacity up to 90kg (200lbs.) at 64'.

The design of its fulcrum with an electronic brake incorporated (manual control and remote control from the back of the crane) allows to adjust the fluid in the Pan and Tilt axis to help the operator to control smoothly the arm in high-speed movements.

In terms of compatibility, the **Scorpio 78'** shares the same Electronic box and Dynamic Counterweight System with its smaller sisters, the **Scorpio 45'** and the **Scorpio 38'**. Even if the **Scorpio 78'** comes with the smallest leveling head from Servicevision, all the **Scorpio Leveling Heads** can be used with the **Scorpio78'**, including the **Scorpio LH300**.

Mobility:

To move the Scorpio 78' on the set there are two different options depending on the terrain: The dolly and the **e-Scorpion L.**

The dolly of the **Scorpio 78'** comes with a hydraulic column to elevate the arm just enough to allow its maximum inclination at 52º and motorized wheels and direction. This motorization allows to move this crane in regular floors and even in ramps up to 10% without any risk due their powerful motors and their brake system.

All the motorization, hydraulics and the arm of the **Scorpio 78'** is powered by two internal batteries to ensure the crane will always be ready to be operated.

And for offroad terrains, due to the well-known modular system of all Scorpio Cranes, it will be possible to attach the fulcrum of the **Scorpio 78'** in a version L of the **e-Scorpion** (an All-terrain electric vehicle), to be able to operate the arm on it in locations impossible to reach for other similar cranes.

Scorpio 78'
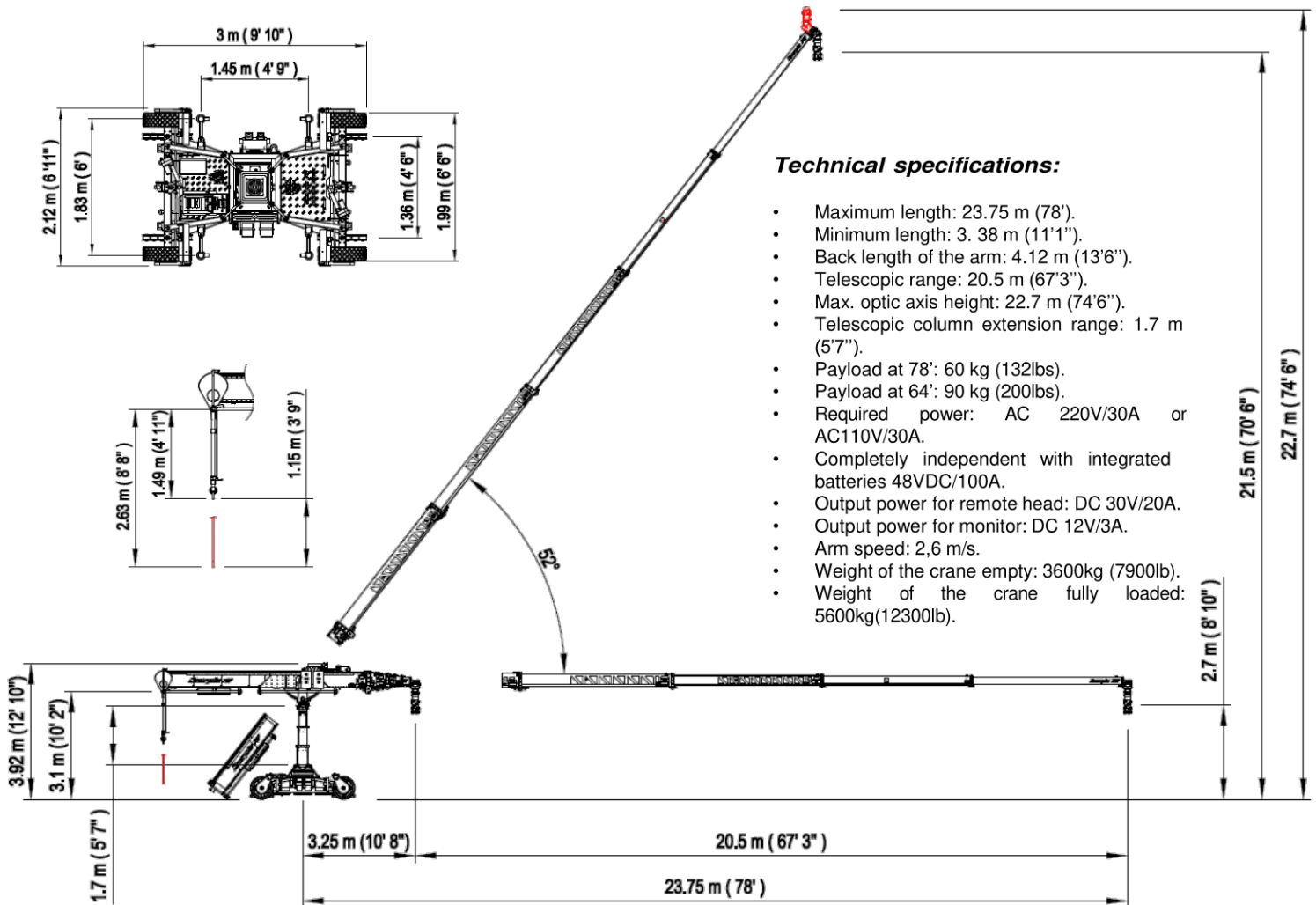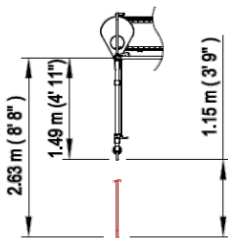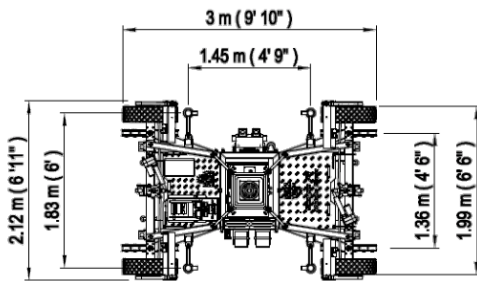
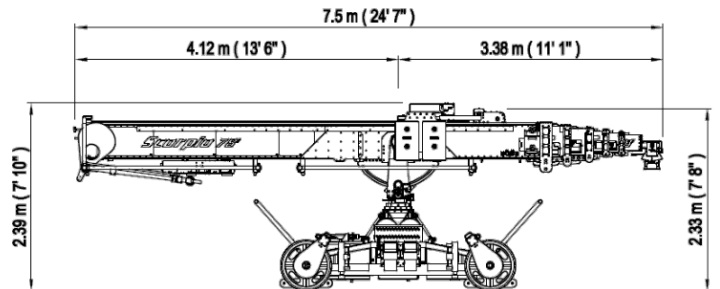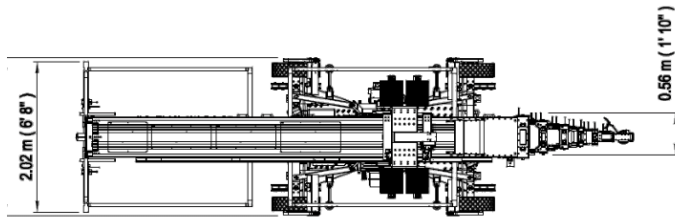## Features:

Digital Electronic control box with:
- Automatic compensator of the arc generated by the movement of the arm in both Pan and Tilt.
- Programmable limits of the telescopic movement of the arm.
- Programmable movements of the telescopic arm.
- Motion Generator of the telescopic arm respect to Pan or Tilt.
- Data displayed on screen: arm range, height of the optic axis and Pan and Tilt angles.
- Arm speed and Damping adjustable and displayed on the screen.
- Programmable Stop Sequence.
- Pan, Tilt and Arm encoder output for Motion Capture jobs.
- Interfacing possibility between Scorpio head and crane, allowing us to perform back pan or tracking.

Dolly:
- 3 telescopic sections column to rise the position of the arm hydraulically from 1,4m (4'7'')to 3.1m(10'2'').
- Travelling wheels for 1,36m (4'5'') track.
- The wheels pivot over the center of the tires.
- Rod supports for gripping bars.
- Hydraulic levelling jack with automatic or manual level control build in.
- Motorized wheels and steering.
- Build-in inverter to provide 110VAC or 22VAC.
- Speed of the dolly: 6km/h.

Arm:
- 5 telescopic sections plus Central Arm.
- Smooth movement in high and slow speed.
- Noise reduction system of the telescopic arm movement.
- The head can be mounted Underslung or Overslung or replaced by the **LH300.**
- Dynamic counterweight system to compensate the balance weight during motion.
- Adjustable fluid in Pan and Tilt.
- 52º inclination on the Tilt arm.
- Telescopic handlebars to an easy control for operator, balanced in all positions.

Technical specifications:

- Maximum length: 23.75 m (78').
- Minimum length: 3. 38 m (11'1").
- Back length of the arm: 4.12 m (13'6'').
- Telescopic range: 20.5 m (67'3'').
- Max. optic axis height: 22.7 m (74'6'').
- Telescopic column extension range: 1.7 m (5'7'').
- Payload at 78': 60 kg (132lbs).
- Payload at 64': 90 kg (200lbs).
- Required power: AC 220V/30A or AC110V/30A.
- Completely independent with integrated batteries 48VDC/100A.
- Output power for remote head: DC 30V/20A.
- Output power for monitor: DC 12V/3A.
- Arm speed: 2,6 m/s.
- Weight of the crane empty: 3600kg (7900lb).
- Weight of the crane fully loaded: 5600kg(12300lb).