



MIRICLE TB2-30 Ultra Rugged Thermal Imaging Camera from Thermoteknix Systems Ltd

One Giant Leap For Thermoteknix

High-tech Cambridge-based thermal imaging company Thermoteknix is travelling to the moon with NASA's LCROSS mission which launched last week to search for the presence of water.

LCROSS is the Lunar Crater Observation and Sensing Satellite NASA mission.

LCROSS's objective is to blast two large impactors into a permanently shadowed crater at one of the Lunar poles to create a plume of material that can be analyzed for the presence of water on the moon.

LCROSS is travelling to the moon as the payload aboard the launch vehicle for the Lunar Reconnaissance Orbiter (LRO). As part of this payload, NASA have selected Thermoteknix' MIRICLE® TB2-30 ultra-ruggedized thermal imaging camera to monitor temperature variations in the blasts within the crater and the resulting plume. MIRICLE TB2-30 is the same camera which has already been used on Formula 1 and Indycar racecars and most recently in several highly successful 'Aegis' Ballistic Missile Defence tests. The MIRICLE® radiometric aerospace qualified system is calibrated for temperature measurement in the harshest of environments under the most extreme vibration conditions.



LCROSS payload being prepared for launch (Image Courtesy NASA)

The Mission Objectives of the Lunar Crater Observation and Sensing Satellite (LCROSS) are to advance the Vision for Space Exploration (VSE) by looking for the presence of water ice in a permanently shadowed crater at the moon's South Pole. LCROSS will attempt to do this by blasting two heavy impactors into the crater to test the theory that ancient ice lies buried there. The impact will cause an explosion of material from the crater's surface to create a plume that specialized instruments, including the Thermoteknix camera, will be able to analyse for the presence of water (ice and vapour), hydrocarbons and hydrated materials.

It is thought that the impacts may be so large that they will be visible from earth.

Thermoteknix Managing Director Dr Richard Salisbury said:
'As a Cambridge-based, British company, Thermoteknix are delighted to have been selected to play a critical part in NASA's important mission to find water on the moon which is vital for the future of long term space exploration. Thermoteknix is recognised all over the world as a leader and innovator in the field of thermal imaging and our proven product involvement in the US Aegis Space Defense program as well as high profile thermal imaging in Formula 1 and Indycar racing led to our selection by NASA for this exciting and demanding mission. We are all very proud of this achievement.'



Upper stage being mounted onto the Atlas V booster, Cape Canaveral (Image Courtesy NASA)

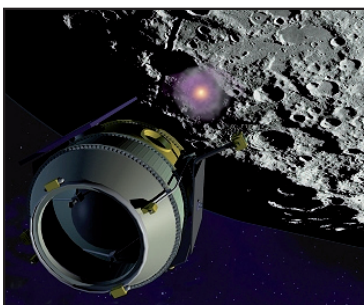
Click the link below to see BBC 1 TV News coverage of this story:

http://www.thermoteknix.com/content/english/stories/lcross_nasa_moon_mission/nasa_lcross_movie.html

The identification of water is very important to the future of human activities on the moon as it will not be practical to transport to space the amount of water needed for human and exploration needs. The Lunar Crater Observation and Sensing Satellite (LCROSS) mission will begin the search for water, using information learned from the previous Lunar missions.

LCROSS successfully lifted off on June 19th and impact is expected to take place in October 2009.

Cambridge company Thermoteknix Systems Ltd was founded in 1982 and has been at the forefront of thermal imaging technology for over a quarter of a century. Thermoteknix has twice been awarded the coveted Queen's Award – most recently in 2008 for Innovation for its MIRICLE® range of thermal imaging cameras.



Impactor is launched at the Moon (Artist's Impression - Image Courtesy NASA)