In this paper, we consider the M/M/1 queueing model with an attached continuous-type inventory. Customers are arrived into the system according to the Poisson process and served one by one under FCFS discipline. The service times of customers are assumed to be iid exponential random variables. Along with the queue, there is an internal finite storage for the inventory and each service requires random amount \( Y \) of inventory from the storage. Therefore, a customer leaves the system with \( Y \) amount of item at his service completion epoch. The inventory is replenished by an outside supplier with random lead time under \((s, S)\) inventory control policy. We consider two types of lost sales: 1) the inventory lost-sales at a service completion epoch and 2) the customer lost-sales during stock-out periods. For this queueing-inventory system, we derive the stationary joint probability of queue length and the inventory level in product-form. A cost model followed by numerical examples is presented.